Resistor/Capacitor Decoding
MIL 規格　抵抗・コンデンサコード一覧表

お客様各位
このたびは、Relex 信頼性工学資料をダウンロードいただきまして、誠にありがとうございます。Relex ソフトウエアでは、信頼性、保全性及び安全性解析に必要な下記ツールをご用意しております。Relex デモ CD 及び資料ご希望の方は、弊社ホームページ又は下記よりお申し込みください。
本資料が皆様方の業務にお役に立てば幸いです。

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1）信頼度予測（MTBF 計算）
サポートしている信頼度予測モデル
- MIL-HDBK-217 (PARTS STRESS / PARTS COUNT)
- TELCORDIA / BELLCORE SR-332
- CNET93
- RDF2000
- HRD5
- Relex PRISM
- Relex 299B Parts Stress（中国信頼度予測モデル）
- Relex 299B Parts Count （中国信頼度予測モデル）
- NSWC-98/LE1
- NPRD95

2）信頼性ブロック図(RBD)
3）Relex OpSim
4）Relex Weibull(ワイブル)
5）Relex Markov
6）FMEA/FMECA
7）FAULT TREE / EVENT TREE
8）保全性予測（MTTR）
9）**ライフサイクルコスト(LCC)**
10）**Relex FRACAS**

Resistor/Capacitor Decoding

The Relex Resistor/Capacitor Library file contains all resistor and capacitor types supported by MIL-HDBK-217. Military and commercial companies alike have adopted the part numbering conventions used. The decoding in the Relex Resistor/Capacitor Library file is described in the following section. This section describes the basic resistor and capacitor styles and types that are supported and reviews each of the prefixes associated with those part types. Due to the numerous variations in part numbers for these parts, the part numbers in the resistor/capacitor library have been decoded in a special way. The more detailed the part number, the more specific information that is retrieved from the Library file for those parts.

The Relex Resistor and Capacitor Library file can save thousands of hours of time by automatically providing you with the appropriate information. And, even though the Library file is very large, access times are a fraction of a second.

The following table describes the resistor and capacitor types included in the Relex Resistor/Capacitor Library file:

Resistor Style	Type	MIL-Spec	Description
Composition, Fixed	RC	MIL-R-11	Resistors, Fixed, Composition, Insulated
	RCR	MIL-R-39008	Resistors, Fixed, Composition, Insulated, Established Reliability
Film, Fixed	RD	MIL-R-11804	Resistors, Fixed, Film, Power Type
	RN	MIL-R-10509	Resistors, Fixed, Film, High Stability
	RL	MIL-R-22684	Resistors, Fixed, Film, Insulated
	RLR	MIL-R-39017	Resistors, Fixed, Film, Insulated, Established Reliability
	RNR	MIL-R-55182	Resistors, Fixed, Film, Established Reliability
	RM	MIL-R-55342	
	RNC		
	RNN		
Special (Networks)	RZ	MIL-R-83401	Resistor, Network, Fixed, Film
Special (Thermistors)	RTH	MIL-T-23648	Thermistor (Thermally Sensitive Resistor), Insulated
Wirewound, Fixed	RW	MIL-R-26	Resistors, Fixed, Wirewound, Power Type
	RB	MIL-R-93	Resistors, Fixed, Wirewound, Accurate
	RE	MIL-R-18546	Resistors, Fixed, Wirewound, Power Type, Chassis Mounted
	RBR	MIL-R-39005	Resistors, Fixed, Wirewound, Accurate, Established Reliability

Resistor Style	Type	MIL-Spec	Description
	RWR	MIL-R-39007	Resistors, Fixed, Wirewound, Power Type, Established Reliability
	RER	MIL-R-39009	Resistors, Fixed, Wirewound, Power Type, Chassis Mounted, Established Reliability
Non-wirewound, Variable	RV	MIL-R-94	Resistors, Variable, Composition
	RJ	MIL-R-22097	Resistors, Variable, Non-wirewound, Lead Screw Actuated
	RVC	MIL-R-23285	Resistors, Variable, Film
	RQ	MIL-R-39023	Resistors, Variable, Non-wirewound, Precision
	RJR	MIL-R-39035	Resistors, Variable, Cermet or Carbon Film, Lead Screw Actuated, Established Reliability
Wirewound, Variable	RP	MIL-R-22	Resistors, Variable, Wirewound, Low Operating Temperature
	RA	MIL-R-19	Resistors, Variable, Wirewound, Power Type
	RR	MIL-R-12934	Resistors, Variable, Wirewound, Precision
	RT	MIL-R-27208	Resistors, Variable, Wirewound, Lead Screw Actuated
	RK	MIL-R-39002	Resistors, Variable, Wirewound, Semi-Precision
	RTR	MIL-R-39015	Resistors, Variable, Wirewound, Lead Screw Actuated, Established Reliability

Capacitor Style	Type	MIL-Spec	Description
Paper/Plastic Film	CP	MIL-C-25	Capacitors, Fixed, Paper
	CZ	MIL-C-11693	Capacitors, Fixed, Paper, Metallized Paper, Metallized Plastic, RFI Feed-Thru, Established Reliability
	CA	MIL-C-12889	Capacitors, Fixed, paper, RFI Bypass
	CPV	MIL-C-14157	Capacitors, Fixed, Paper-Plastic, Established Reliability
	CH	MIL-C-18312	Capacitors, Metallized Paper, Paper-Plastic, Plastic
	CQ	MIL-C-19978	Capacitors, Fixed, Plastic or Paper-Plastic
	CQR	MIL-C-19978	Capacitors, Fixed, Plastic or Paper-Plastic, Established Reliability
	CHR	MIL-C-39022	Capacitors, Fixed, Metallized, Paper-Plastic Film or Plastic Film Dielectric, Established Reliability
	CFR	MIL-C-55514	Capacitors, Plastic, Metallized Plastic, Established Reliability
	CRH	MIL-C-83421	Capacitors, Super-Metallized Plastic, Established Reliability
Mica	CM	MIL-C-5	Capacitors, Fixed, Mica
	CB	MIL-C-10950	Capacitors, Fixed, Mica, Button Style
	CMR	MIL-C-39001	Capacitors, Fixed, Mica, Established Reliability
Glass	CY	MIL-C-11272	Capacitors, Glass
	CYR	MIL-C-23269	Capacitors, Fixed, Glass, Established Reliability
Ceramic	CC	MIL-C-20	Capacitors, Fixed, Ceramic, Temperature Compensating
	CCR	MIL-C-20	Capacitors, Fixed, Ceramic, Temperature Compensating
	CK	MIL-C-11015	Capacitors, Fixed, Ceramic, General Purpose
	CKR	MIL-C-39014	Capacitors, Fixed, Ceramic, General Purpose, Established Reliability
	CDR	MIL-C-55681	Capacitors, Fixed, Ceramic, General Purpose, Established Reliability, Chip
Electrolytic	CE	MIL-C-62	Capacitors, Fixed, Electrolytic, DC, aluminum, Dry Electrolyte, Polarized
	CL	MIL-C-3965	Capacitors, Fixed, Electrolytic, Non-solid Electrolyte, Tantalum
	CSR	MIL-C-39003	Capacitors, Fixed, Electrolytic, Tantalum, Solid Electrolyte, Established Reliability
	CLR	MIL-C-39006	Capacitors, Fixed, Electrolytic, Tantalum, Non-solid Electrolyte, Established Reliability
	CU	MIL-C-39018	Capacitors, Fixed, Electrolytic, Aluminum Oxide

Capacitor Style	Type	MIL-Spec	Description
	CUR	MIL-C-39018	Capacitors, Fixed, Electrolytic, Aluminum Oxide
	CWR	MIL-C-55365	
	CRL	MIL-C-83500	
Variable	CV	MIL-C-81	Capacitors, Variable, Ceramic
	CT	MIL-C-92	Capacitors, Air, Trimmer
	PC	MIL-C-14409	Capacitors, Variable, Piston Type, Tubular Trimmer
Vacuum/Gas	CG	MIL-C-23183	Capacitors, Vacuum or Gas, Fixed and Variable

The remainder of this document provides specific details regarding how the part numbers are decoding when Relex searches the Resistor/Capacitor Library file.

RESISTORS -- Example Part Numbers

Composition, Fixed

RC MIL-R-11

RC06 GF 153 K

| | | |

| | | RESISTANCE TOLERANCE:

| | | G = +/- 2%

| | | J = +/- 5%

| | | K = +/- 10%

| | RESISTANCE:

| | See "Notes regarding Three-Digit Resistance Figures"

| CHARACTERISTIC:

| G & F represent maximum ambient-temperature characteristic

| and resistance-temperature characteristics as per extensive

| tables

STYLE:

RC plus 2-digit number referencing Size and Power Rating

(i.e., RC05, RC06, RC07, RC20, RC32, RC42)

RCR MIL-R-39008

RCR07 G 470 J M

| | | | |

| | | | FAILURE RATE LEVEL:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | RESISTANCE TOLERANCE:

| | | J = +/- 5%

| | | K = +/- 10%

| | RESISTANCE:

| | See "Notes regarding Three-Digit Resistance Figures"

| CHARACTERISTIC:

| G = resistance-temp characteristic as

| per extensive table

STYLE:

RCR plus 2-digit number referencing Size and Power Rating

(i.e., RCR05, RCR07, RCR20, RCR32, RCR42)

Film, Fixed

RD MIL-R-11804

RD60 G 10R0 G
| | | |
| | | RESISTANCE TOLERANCE:
| | | G = +/- 2%
| | | J = +/- 5%
| | RESISTANCE:
| | See "Notes regarding Four-Digit Resistance Figures"
| CHARACTERISTIC:
| P = Max. continuous operating temp 235 degrees C
| G = Max. continuous operating temp 275 degrees C
STYLE:
RD plus 2-digit number referencing Size and Power Rating
(i.e., RD31, RD33, RD36, RD37, RD39, RD60, RD65, RD70)
Film, Fixed (Continued)

RN MIL-R-10509

RN60 D 1003 F
| | | |
| | | RESISTANCE TOLERANCE:
| | | B = +/- 0.10%
| | | C = +/- 0.25%
| | | D = +/- 0.50%
| | | F = +/- 1.00%
| | RESISTANCE:
| | See "Notes regarding Four-Digit Resistance Figures"
| CHARACTERISTIC:
| B, C, D, E, F, or G (based on extensive table)
STYLE:
RN plus 2-digit number referencing Size
(i.e., RN60)

Film, Fixed (cont.)

RL MIL-R-22684

RL42 S 100 G TX
| | | | |
| | | | TX IDENTIFICATION
| | | RESISTANCE TOLERANCE:
| | | G = +/- 2%
| | | J = +/- 5%
| | RESISTANCE:
| | See "Notes regarding Three-Digit Resistance Figures"
| TERMINAL:
| S = Solderable terminals
STYLE:
RL plus 2-digit number referencing Size and Power Rating
(i.e., RL42)

RLR MIL-R-39017

RLR07 C 1002 G M
| | | | |
| | | | LIFE FAILURE RATE:
| | | | M = 1.0% / 1,000 hr
| | | | P = 0.1% / 1,000 hr
| | | | R = 0.01% / 1,000 hr
| | | | S = 0.001% / 1,000 hr
| | | RESISTANCE TOLERANCE:
| | | F = +/- 1%
| | | G = +/- 2%
| | RESISTANCE:
| | See "Notes regarding Four-Digit Resistance Figures"
| TERMINAL:
| C = solderable/weldable terminal
STYLE:
RLR plus 2-digit number referencing Size and Power Rating
(i.e., RLR05, RLR07, RLR20, RLR32)

Film, Fixed (cont.)

RNR MIL-R-55182

RNR60 C 1003 F M

| | | | |

| | | | LIFE FAILURE RATE DESIGNATION:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | RESISTANCE TOLERANCE:

| | | B = +/- 0.1%

| | | D = +/- 0.5%

| | | F = +/- 1.0%

| | RESISTANCE:

| | See "Notes regarding Four-Digit Resistance Figures"

| CHARACTERISTIC:

| C = +/-50 ppm/degrees C; 125 degrees C max ambient temp at rated wattage (hermetically sealed)

| H = +/-50 ppm/degrees C; 125 degrees C max ambient temp at rated wattage (nonhermetically sealed)

| E = +/-25 ppm/degrees C; 125 degrees C max ambient temp at rated wattage (hermetically sealed)

| J = +/-25 ppm/degrees C; 125 degrees C max ambient temp at rated wattage (nonhermetically sealed)

| K = +/-100 ppm/degrees C; 125 degrees C max ambient temp at rated wattage

STYLE:

RNR plus 2-digit number referencing Size and Configuration

(i.e., RNR50, RNR55, RNR60, RNR65, RNR70, RNR75)

Film, Fixed (cont.)

RNC

RNC60 C 1003 F M

| | | | |

| | | | LIFE FAILURE RATE DESIGNATION:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | RESISTANCE TOLERANCE:

| | | B = +/- 0.1%

| | | D = +/- 0.5%

| | | F = +/- 1.0%

| | RESISTANCE:

| | See "Notes regarding Four-Digit Resistance Figures"

| CHARACTERISTIC:

| C = +/-50 ppm/degrees C; 125 degrees C max ambient temp at rated wattage (hermetically sealed)

| H = +/-50 ppm/ degrees C; 125 degrees C max ambient temp at rated wattage (nonhermetically sealed)

| E = +/-25 ppm/ degrees C; 125 degrees C max ambient temp at rated wattage (hermetically sealed)

| J = +/-25 ppm/ degrees C; 125 degrees C max ambient temp at rated wattage (nonhermetically sealed)

| K = +/-100 ppm/ degrees C; 125 degrees C max ambient temp at rated wattage

STYLE:

RNC plus 2-digit number referencing Size and Configuration

(i.e., RNC50, RNC55, RNC60, RNC65, RNC70, RNC75)

Film, Fixed (cont.)

RNR90 & RNC90

RNC90 Y 162R00 B M

| | | | |

| | | | LIFE FAILURE RATE DESIGNATION:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | RESISTANCE TOLERANCE:

| | | B = +/- 0.1%

| | | D = +/- 0.5%

| | | F = +/- 1.0%

| | RESISTANCE:

| | See "Notes regarding Six-Digit Resistance Figures"

| CHARACTERISTIC

STYLE:

RNC or RNR plus 2-digit number referencing Size and Configuration (90)

Film, Fixed (cont.)

RM MIL-R-55342

RM0505K 1003 F S M

| | | | | |

| | | | | LIFE FAILURE RATE DESIGNATION:

| | | | | M = 1.0% / 1,000 hr

| | | | | P = 0.1% / 1,000 hr

| | | | | R = 0.01% / 1,000 hr

| | | | | S = 0.001% / 1,000 hr

| | | | TERMINATION MATERIAL:

| | | | G = Solderable, Gold, Wrap around

| | | | W = Bondable, Gold, One surface

| | | | P = Weldable, Gold, Bonding pads

| | | | B = Solderable, Base metal or barrier metal

| | | | (solder coated), Wrap around

| | | | R = Solderable, Pretinned, Wrap around

| | | | S = Solderable, Pretinned, One surface

| | | | U = Bondable, Platinum/gold, Wrap around

| | | | T = Weldable, Platinum/gold, One surface

| | | | C = Bondable, Palladium/silver or Platinum/

| | | | silver, Wrap around

| | | | D = Bondable, Palladium/silver or Platinum/

| | | | silver, One surface

| | | RESISTANCE TOLERANCE:

| | | F, G, or K (based on extensive table)

| | RESISTANCE:

| | See "Notes regarding Four-Digit Resistance Figures"

| CHARACTERISTIC:

| K, M, H, or E

STYLE:

RM plus 4-digit number referencing Size and Power Rating

(i.e. RM0502, RM0505, RM1005, RM1505, RM0705, RM2208, RM1206, RM2010, RM2512, RM1010)

Film, Fixed (cont.)

RM MIL-R-55342 (cont.)

In addition, RM Resistors are also decoded as follows:

```
M55342 K      01      S      1A00    M
|      |      |                     |
|      |      |                     LIFE FAILURE RATE:
|      |      |                     M = 1.0% / 1,000 hr
|      |      |                     P = 0.1% / 1,000 hr
|      |      |                     R = 0.01% / 1,000 hr
|      |      |                     S = 0.001% / 1,000 hr
|      |      SLASH SHEET
|      CHARACTERISTIC:
|             K, M, H, E
SPEC NUMBER:
       (can also start with D)
```

Special

RZ MIL-R-83401 (Resistor Networks)

RZ010 K 1002 J A

| | | | |

| | | | SCHEMATIC:

| | | | A, B, C, or G (based on specific drawings)

| | | RESISTANCE TOLERANCE:

| | | D = +/- 0.5% G = +/- 2%

| | | F = +/- 1% J = +/- 5%

| | RESISTANCE:

| | See "Notes regarding Four-Digit Resistance Figures"

| CHARACTERISTIC:

H = +/- 50 ppm / degrees C

K = +/- 100 ppm / degrees C

M = +/- 300 ppm / degrees C

STYLE:

RZ plus 3-digit number referencing Size and Power Rating

(i.e., RZ010, RZ020, RZ030, RZ040, RZ050)

Special (cont.)

RTH MIL-T-23648 (Thermistors)

RTH06 A S 102 G

| | | | |

| | | | RESISTANCE TOLERANCE:

| | | | F, G, J, or K (based on extensive table)

| | | ZERO POWER RESISTANCE:

| | | The direct current (dc) zero-power resistance

| | | measured at 25 degrees C and expressed in ohms is

| | | identified by a three-digit number. The first

| | | two digits represent significant figures, and

| | | the last digit specifies the number of zeros

| | | to follow. (i.e., 101 = 100 ohms,

| | | 102 = 1,000 ohms, 105 = 1 megohm)

| | LEAD TYPE:

| | S = solderable

| | W = weldable

| RESISTANCE RATIO:

| A = 19.8 +/- 10%

| B = 29.4 +/- 10%

| C = 48.7 +/- 10%

| D = 0.5 +/- 10%

| E = 0.55 +/- 10%

STYLE:

RTH plus 2-digit number referencing physical configuration (i.e., RTH06)

Wirewound, Fixed

RW MIL-R-26

RW33 V 100 T
| | | |
| | | CENTER TAPPED:
| | | T = Center-tapped
| | RESISTANCE:
| | See "Notes regarding Three-Digit Resistance Figures"
| CHARACTERISTIC (Max Operating Temp):
| V = 350 degrees max oper temp; min IR of 100 omega
| N = +/- 400 ppm/ degrees C (R<20 omega) or +/- 260 ppm/ degrees C (R > or = to 20 omega)
STYLE:
RW plus 2-digit number referencing Size and Power Rating
(i.e., RW29, RW31, RW33, RW35, RW37, RW38, RW47, RW56)

RB MIL-R-93

RB08 C E 12701 C
| | | | |
| | | | RESISTANCE TOLERANCE:
| | | | B = +/- 0.10%
| | | | C = +/- 0.25%
| | | | D = +/- 0.50%
| | | | F = +/- 1.00%
| | | RESISTANCE:
| | | See "Notes regarding Five-Digit Resistance Figures"
| | RESISTANCE TEMPERATURE CHARACTERISTIC:
| | E as described in extensive table
| CHARACTERISTIC:
| C = Solderable (Max ambient temp at rated wattage = 125 degrees C,
| Max ambient temp at zero percent rated wattage
| dissipation = 145 degrees C)
| W = Weldable (Max ambient temp at rated wattage = 125 degrees C,
| Max ambient temp at zero percent rated wattage
| dissipation = 145 degrees C)
STYLE:
RB plus 2-digit number referencing Size and Power Rating
(i.e., RB16, RB17, RB18, RB19, RB52, RB53, RB54, RB55, RB56, RB08, RB57,
RB58, RB59, RB70, RB71, RB72, RB73)

Wirewound, Fixed (cont.)

RE MIL-R-18546

RE77 G 1001

| | |

| | RESISTANCE:

| | See "Notes regarding Four-Digit Resistance Figures"

| CHARACTERISTIC:

| G = Inductively Wound

| N = Non-Inductively Wound

STYLE:

RE plus 2-digit number referencing Size and Power Rating

(i.e., RE77 or RE80)

RBR MIL-R-39005

RBR52 L 50R50 A M

| | | | |

| | | | LIFE FAILURE RATE:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | INITIAL RESISTANCE TOLERANCE:

| | | T = +/- .01%

| | | A = +/- .05%

| | | B = +/- .1%

| | | F = +/- 1.0%

| | RESISTANCE:

| | See "Notes regarding Five-Digit Resistance Figures"

| TERMINAL AND delta R PERFORMANCE REQUIREMENT:

| L = solderable (tightened delta R)

| U = weldable (tightened delta R)

STYLE:

RBR plus 2-digit number referencing Size and Rating

(i.e., RBR52, RBR53, RBR54, RBR55, RBR56, RBR57, RBR71, RBR75)

Wirewound, Fixed (cont.)

RWR MIL-R-39007

RWR74 S 1R00 F M

| | | | |

| | | | FAILURE RATE:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | RESISTANCE TOLERANCE:

| | | B = +/- 0.1%

| | | D = +/- 0.5%

| | | F = +/- 1.0%

| | RESISTANCE:

| | See "Notes regarding Four-Digit Resistance Figures"

| TERMINAL & WINDING:

| S = Solderable

| W = Weldable

| N = Solderable, noninductively wound

STYLE:

RWR plus 2-digit number referencing Size/Wattage/Construction

(i.e., RWR74, RWR78, RWR80, RWR81, RWR82, RWR84, RWR89)

RER MIL-R-39009

RER65 F 1001 M

| | | |

| | | FAILURE RATE LEVEL:

| | | M = 1.0% / 1,000 hr

| | | P = 0.1% / 1,000 hr

| | | R = 0.01% / 1,000 hr

| | | S = 0.001% / 1,000 hr

| | RESISTANCE:

| | See "Notes regarding Four-Digit Resistance Figures"

| RESISTANCE TOLERANCE:

| F = +/- 1.0%

STYLE:

RER plus 2-digit number referencing Size and Power Rating

(i.e., RER40, RER45, RER50, RER55, RER60, RER65, RER70, RER75)

Non-wirewound, Variable

RV MIL-R-94

RV4 S A Y SA 500 A

| | | | | | |

| | | | | | RESISTANCE CHARACTERISTIC:

| | | | | | A = Taper A

| | | | | | C = Taper C

| | | | | RESISTANCE:

| | | | | See "Notes regarding Three-Digit

| | | | | Resistance Figures"

| | | | OPERATING SHAFT:

| | | | SA = 5/8", screwdriver slot

| | | | SD = 7/8", knob

| | | | SB = 1/2", screwdriver slot

| | | | SL = 3/8", screwdriver slot

| | | TEMP & MOISTURE RESISTANCE CHARACTERISTIC:

| | | Y = 120 degrees C max ambient temp; 70 degrees max

| | | ambient temp at rated wattage and

| | | delta R due to moisture resistance change

| | | (average-6%, maximum-10%, insulation

| | | resistance-100megohms)

| | SWITCH:

| | A = absence of a switch

| BUSHING:

| T = Locking bushing, shaft and panel seal

| S = Standard bushing, shaft and panel seal

STYLE:

RV plus 1-digit number referencing Size and Power Rating

(i.e., RV4 or RV6)

Non-wirewound, Variable (cont.)

RJ MIL-R-22097

RJ12 C Y 103
| | | |
| | | RESISTANCE:
| | | See "Notes regarding Four-Digit Resistance Figures"
| | TERMINALS:
| | L = flexible, insulated-wire leads
| | P = printed-circuit pins
| | Y = applicable to RJ12 only
| CHARACTERISTIC:
| C or F (based on extensive table)
STYLE:
RJ plus 2-digit number referencing Physical Size
(i.e., RJ12, RJ50)

Non-wirewound, Variable (cont.)

RVC MIL-R-23285

RVC6 N Y A 500 B

| | | | | |

| | | | | RESISTANCE CHARACTERISTIC:

| | | | | B = Taper A

| | | | | C = Taper C

| | | | RESISTANCE:

| | | | See "Notes regarding Three-Digit Resistance

| | | | Figures"

| | | OPERATING SHAFT:

| | | A = 5/8", screwdriver slot

| | | D = 7/8", knob

| | | L = 3/8", screwdriver slot

| | TEMP & MOISTURE RESITANCE CHARACTERISTIC:

| | Y = max ambient operating temp (125 degrees C, full

| | rated load; 175 degrees C, zero load); resistance-

| | temp coefficient--(250 ppm / degrees C; resistance-

| | moisture characteristic-- +/- 2% max allowable

| | change in total resistance

| BUSHING:

| L = locking bushing

| N = standard bushing

STYLE:

RVC plus 1-digit number referencing Size and Power Rating

(i.e., RVC6)

Non-wirewound, Variable (cont.)

RJR MIL-R-39035

RJR24 C L 102 M

| | | | |

| | | | LIFE FAILURE RATE:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | RESISTANCE:

| | | See "Notes regarding Three-Digit Resistance Figures"

| | TERMINALS:

| | D = printed circuit terminals

| | L = Flex, insulated wire leads

| | P = printed circuit pins (base mount)

| | W = printed circuit pins (edge mount)

| | X = printed circuit pins (edge mount -

| | alternate configuration)

| | Y = printed circuit pins (staggered - RJR12 only)

| CHARACTERISTIC:

| C = +/- 250 ppm/(C

| F = +/- 100 ppm/(C

| H = +/- 50 ppm/(C

STYLE:

RJR plus 2-digit number referencing Physical Size

(i.e., RJR12, RJR24, RJR26, RJR28, RJR32, RJR50)

RQ MIL-R-39023

RQ090 A A 1 3 A A 101

| | | | | | | |

| | | | | | | RESISTANCE:

| | | | | | | See "Notes regarding

| | | | | | | Three-Digit Resistance

| | | | | | | Figures"

| | | | | | OUTPUT-SMOOTHNESS CHAR.:

| | | | | | A = 2.0 initial; 2.2 degraded

| | | | | | B = 0.5 initial; 0.7 degraded

| | | | | | C = 0.1 initial; 0.15 degraded

| | | | | | D = 0.025 initial; 0.04 degraded

| | | | | | E = 0.01 initial; 0.02 degraded

| | | | | FUNCTION CONFORMITY TOLERANCE CHAR:

| | | | | A = 1.0 initial; 1.5 degraded

| | | | | B = 0.5 initial; 0.75 degraded

| | | | | C = 0.25 initial; 0.375 degraded

| | | | | D = 0.10 initial; 0.15 degraded

| | | | | E = 0.05 initial; 0.075 degraded

| | | | | F = 0.025 initial; 0.038 degraded

| | | | LIFE CHARACTERISTIC:

| | | | 1 = 2.5 x 10^5 rev; 0.5 hr

| | | | 2 = 1 x 10^6 rev; 2 hr

| | | | 3 = 5 x 10^6 rev; 10 hr

| | | | 4 = 25 x 10^6 rev; 50 hr

| | | MOISTURE RESISTANCE:

| | | 1 = +/- 5%

| | | 2 = +/- 10%

| | | 3 = +/- 25%

| | SHAFT LENGTH:

| | A = 3/8

| | B = 1/2

| | C = 5/8

| | D = 3/4

| | E = 7/8

| | F = 1

| RESISTANCE TEMP. CHARACTERISTIC:

| (5% max resistance change; 70 degrees C (max ambient temp

| at rated load), 125 degrees C (max ambient temp with zero

| load); and taps located at center of resistance

| element

| A = not applicable

| B = applicable

STYLE:

RQ plus 3-digit number referencing Physical Size

(i.e., RQ090, RQ100, RQ110, RQ150, RQ160, RQ200, RQ210, RQ300)

Wirewound, Variable

RP MIL-R-22

RP05 | 1 | SB | 100 | KK

| 1 | ELECTRICAL OFF POSITION:
| | 1 = No off position
| | 2 = Off position at end of rotation of control knob in a CCW direction
| | 3 = Off position at end of rotation of control know in CW direction

| SB | SHAFT AND TYPE OF MOUNTING:
| | SA = 1/2" standard bushing
| | SB = 5/8" standard bushing
| | SD = 7/8" locking bushing
| | SJ = 2" standard bushing
| | SS = 3/8" standard bushing

| 100 | RESISTANCE:
| | See "Notes regarding Three-Digit Resistance Figures"

| KK | RESISTANCE TOLERANCE:
| | KK = resistance tolerance of (10%)

STYLE:

RP plus 2-digit number referencing Size and Power Rating
(i.e., RP05, RP06, RP10, RP15, RP20, RP25, RP30)

Wirewound, Variable (cont.)

RA MIL-R-19

RA20 T A SA 3R0 A

| | | | | |

| | | | | RESISTANCE CHARACTERISTIC:

| | | | | A = Taper A

| | | | | C = Taper C

| | | | RESISTANCE:

| | | | See "Notes regarding Three-Digit Resistance

| | | | Figures"

| | | OPERATING SHAFT:

| | | S indicates Slotted

| | | SB = 5/8 inch screwdriver slotted

| | | SD = 7/8 inch knob

| | | SA = 1/2 inch screwdriver slotted

| | SWITCH:

| | A = No Switch

| | B = Single-pole, single-throw

| BUSHING:

| N = Standard

| L = Locking

| S = Shaft

| T = shaft and panel seal (locking)

STYLE:

RA plus 2-digit number referencing Size and Power Rating

(i.e., RA20 or RA30)

Wirewound, Variable (cont.)

RR MIL-R-12934

RR0900 B 3 A 9 G 101

| | | | | | |

| | | | | | RESISTANCE:

| | | | | | See "Notes regarding Three-Digit

| | | | | | Resistance Figures"

| | | | | FUNCT. CONFORMITY/RESISTANCE TOLERANCE CHAR.

| | | | | G = +/- 1.0% FCT; +/- 3% RT

| | | | | J = +/- 0.10% FCT; +/- 3% RT

| | | | | L = +/- 0.025% FCT; +/- 3% RT

| | | | | S = +/- 1.0% FCT; +/- 1% RT

| | | | | V = +/- 0.10% FCT; +/- 1% RT

| | | | | Y = +/- 0.025% FCT; +/- 1% RT

| | | | ROTATIONAL LIFE CHARACTERISTIC:

| | | | 9 = 500,000 single turn; 100,000 ten turn

| | | RESISTANCE TEMPERATURE CHARACTERISTIC

| | | A = +/- .003

| | | C = +/- .010

| | CLASS & CENTER TAP:

| | 85 degrees C maximum ambient temp at rated wattage,

| | 150 degrees C maximum ambient operating temperature

| | 3 = Not applicable

| | 5 = Applicable

| FUNCTION & SHAFT LENGTH:

| A = 3/8 (servo mounted), 3/4 (bushing mounted)

| B = 1/2 (servo mounted, 7/8 bushing mounted)

| C = 5/8 (servo mounted), 1 (bushing mounted)

| D = 3/4 (servo mounted), 1-1/8 (bushing mounted)

| E = 7/8 (servo mounted), 1-1/4 (bushing mounted)

| F = 1 (servo mounted), 1-3/8 (bushing mounted)

STYLE:

RR plus 4-digit number referencing Physical Size

(i.e., RR0900, RR1100, RR2000, RR3000, RR1000, RR1300, RR1400,

RR2100, RR3100, RR3200, RR3300, RR3400, RR3500, RR3700, RR3900,

RR4000, RR4100)

Wirewound, Variable (cont.)

RT MIL-R-27208

RT26 C 2 W 102
| | | | |
| | | | RESISTANCE:
| | | | See "Notes regarding Three-Digit Resistance
| | | | Figures"
| | | TERMINALS:
| | | P = printed circuit pins
| | | W = printed circuit pins (edge-mounted)
| | | X = printed circuit pins (edge-mounted,
| | | alternate configuration)
| | TEMPERATURE CHARACTERISTIC:
| | 2 = 85 degrees C max ambient temp at rated wattage
| | 150 degrees C max ambient operating temp
| RESISTANCE TEMPERATURE CHARACTERISTIC:
| C = 50 ppm / degrees C (ref to 25 degrees C)
STYLE:
RT plus 2-digit number referencing Physical Size
(i.e., RT26)

RK MIL-R-39002

RK09 SA C S 101
| | | | |
| | | | RESISTANCE:
| | | | See "Notes regarding Three-Digit Resistance
| | | | Figures"
| | | TERMINALS:
| | | S = solder-lug type terminals
| | RESISTANCE TEMPERATURE CHARACTERISTIC:
| | C = (200 ppm (under 50 ohms)
| | (70 ppm (50 ohms and over)
| SHAFT AND TYPE MOUNTING:
| SA = .500 inch
| SB = .625 inch
STYLE:
RK plus 2-digit number referencing Physical Size
(i.e., RK09)

Wirewound, Variable (cont.)

RTR MIL-R-39015

RTR12 D Y 102 M

| | | | |

| | | | LIFE FAILURE RATE:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | RESISTANCE:

| | | See "Notes regarding Three-Digit Resistance Figures"

| | TERMINALS:

| | L = flex, insulated wire leads

| | P = printed circuit pins (base mount)

| | W = printed circuit pins (edge mount)

| | X = printed circuit pins (edge mount-
alternate configuration)

| | Y = printed circuit pins (staggered-RTR12 only)

| CHARACTERISTIC:

| D = resistance temperature of +/-50 ppm / degrees C; maximum
ambient temperature of 85 degrees C at rated wattage, and
maximum ambient operating temperature of 150 degrees C at
zero load

STYLE:

RTR plus 2-digit number referencing Physical Size
(i.e., RTR12, RTR22, RTR24)

NOTES REGARDING RESISTANCE:

Notes regarding Three-Digit Resistance Figures

A three-digit number identifies the resistance value expressed in ohms; the first two digits represent significant figures and the last digit specifies the number of zeros to follow. When resistance values less than 10 ohms are required, the letter "R" is substituted for one of the significant digits to represent the decimal point. When the letter "R" is used, succeeding digits of the group represent significant figures as shown in the following example:

2R7 = 2.7 ohms

Notes regarding Four-Digit Resistance Figures

A four-digit number identifies the resistance value expressed in ohms; the first three digits represent significant figures and the last digit specifies the number of zeros to follow. When resistance values less than 100 ohms are required, the letter "R" is substituted for one of the significant digits to represent the decimal point. When the letter "R" is used, succeeding digits of the group represent significant figures as shown in the following example:

10R0 = 10.0 ohms

Notes regarding Five-Digit Resistance Figures

A five-digit number identifies the resistance value expressed in ohms; the first four digits represent significant figures and the last digit specifies the number of zeros to follow. When resistance values less than 1000 ohms are required, the letter "R" is substituted for one of the significant digits to represent the decimal point. When the letter "R" is used, succeeding digits of the group represent significant figures as shown in the following example:

10R00 = 10.00 ohms

Notes regarding Six-Digit Resistance Figures

A six-digit number identifies the resistance value expressed in ohms; the first five digits represent significant figures and the last digit specifies the number of zeros to follow. When resistance values less than 10000 ohms are required, the letter "R" is substituted for one of the significant digits to represent the decimal point. When the letter "R" is used, succeeding digits of the group represent significant figures as shown in the following example:

100R00 = 100.00 ohms

Capacitor - Example Part Numbers

Paper/Plastic Film

CP MIL-C-25

CP10 A 1 K B 273 K 1

| | | | | | | |

| | | | | | | VIBRATION GRADE:

| | | | | | | 1 = Frequency range (Hz)

| | | | | | | 10 to 55 incl.

| | | | | | | 3 = Frequency range (Hz)

| | | | | | | 10 to 2,000 incl.

| | | | | | CAPACITANCE TOLERANCE:

| | | | | | K = +/- 10% L = +/- 15% V = +/- 20%

| | | | | CAPACITANCE:

| | | | | See "Notes regarding

| | | | | Capacitance Figures"

| | | | VOLTAGE:

| | | | B = 100 volts K = 2,500 volts

| | | | C = 200 volts L = 3,000 volts

| | | | D = 250 volts M = 4,000 volts

| | | | E = 400 volts N = 5,000 volts

| | | | F = 600 volts P = 6,000 volts

| | | | G = 1,000 volts R = 7,500 volts

| | | | H = 1,500 volts S = 10,000 volts

| | | | J = 2,000 volts T = 12,500 volts

| | | CHARACTERISTIC:

| | | A, B, E, F, or K (based on extensive table)

| | CIRCUIT:

| | 1, 2, 3, 4, 5, or 6 (based on table and drawings)

| TERMINAL:

| A = Axial wire leads

| B = Solder lug (non-removable)

| C = Threaded stud and nuts

| D = Pillar insulator for use at altitudes up to 7,500 ft,

| furnished with threaded stud and nuts

| E = Pillar insulator for use at altitudes up to 50,000 ft

| F = hooked-wire lead

STYLE:

CP plus 2 digit number representing Shape and Size (i.e., CP07, CP10)

Paper/Plastic Film (cont.)

CZ MIL-C-11693

CZ23 B K B 473
| | | | |
| | | | CAPACITANCE:
| | | | See "Notes regarding Capacitance Figures"
| | | VOLTAGE:
| | | B = 100 volts, dc
| | | C = 200 volts, dc
| | | E = 400 volts, dc
| | | F = 600 volts, dc
| | | J = 1,200 volts, dc
| | | U = 250 volts, ac
| | CHARACTERISTIC:
| | P, K, E, or W (based on extensive table)
| CURRENT:
| A = 5 amperes
| B = 10 amperes
| D = 20 amperes
| F = 50 amperes
| H = 100 amperes
| K = 300 amperes

NON-ER STYLE:

CZ plus 2 digit number representing Shape and Size

(i.e., CZ23)

Paper/Plastic Film (cont.)

CA MIL-C-12889

CA32 K F U 103
| | | | |
| | | | CAPACITANCE:
| | | | See "Notes regarding Capacitance Figures"
| | | VOLTAGE:
| | | B = 100 Volts
| | | U = 250 Volts
| | | W = 500 Volts
| | CHARACTERISTIC:
| | F = based on extensive table
| TERMINAL:
| A = Axial wire lead
| B = Solder lug
| K = Screw-type terminal
STYLE:
CA plus 2 digit number representing Shape and Size
(i.e., CA32)

Paper/Plastic Film (cont.)

CPV MIL-C-14157

CPV09 A 1 K C 562 J M

| | | | | | | |

| | | | | | | FAILURE RATE LEVEL:

| | | | | | | M = 1.0% / 1,000 hr

| | | | | | | P = 0.1% / 1,000 hr

| | | | | | | R = 0.01% / 1,000 hr

| | | | | | | S = 0.001% / 1,000 hr

| | | | | | CAPACITANCE TOLERANCE:

| | | | | | F = +/- 1%

| | | | | | J = +/- 5%

| | | | | | K = +/- 10%

| | | | | CAPACITANCE:

| | | | | See "Notes regarding Capacitance

| | | | | Figures"

| | | | RATED VOLTAGE:

| | | | A = 50 volts

| | | | B = 100 volts

| | | | C = 200 volts

| | | | D = 300 volts

| | | | E = 400 volts

| | | | F = 600 volts

| | | CHARACTERISTIC:

| | | K = Operating temp range -65 to +125 degrees C

| | | P = Operating temp range -65 to +65 degrees C

| | | Q = Operating temp range -55 to +85 degrees C

| | CIRCUIT:

| | 1 or 3 (based on extensive table and drawings)

| TERMINAL:

| A = Axial-wire lead

STYLE:

CPV plus 2 digit number representing Shape and Size

(i.e., CPV09)

Paper/Plastic Film (cont.)

CH MIL-C-18312

CH09 A 1 N F 225 M

| | | | | | |

| | | | | | CAPACITANCE TOLERANCE:

| | | | | | J = 5%

| | | | | | K = 10%

| | | | | | M = 20%

| | | | | CAPACITANCE:

| | | | | See "Notes regarding Capacitance

| | | | | Figures"

| | | | VOLTAGE RATING:

| | | | A = 50

| | | | V = 150

| | | | C = 200

| | | | E = 400

| | | | F = 600

| | | CHARACTERISTIC:

| | | R = Operating temp range of -55 to +85 degrees C

| | | N = Operating temp range of -55 to +125 degrees C

| | CIRCUIT:

| | 1 or 3 based on specific drawings

| TERMINAL:

| A = Axial wire-lead

| B = Solder lug (non-removable)

STYLE:

CH plus 2 digit number representing Shape

(i.e., CH09)

Paper/Plastic Film (cont.)

CHR MIL-C-39022

CHR09 B 1 N E 605 K M

| | | | | | | |

| | | | | | | FAILURE RATE SYMBOL:

| | | | | | | M = 1.0% / 1,000 hr

| | | | | | | P = 0.1% / 1,000 hr

| | | | | | | R = 0.01% / 1,000 hr

| | | | | | | S = 0.001% / 1,000 hr

| | | | | | CAPACITANCE TOLERANCE:

| | | | | | J = +/- 5%

| | | | | | K = +/- 10%

| | | | | CAPACITANCE:

| | | | | See "Notes regarding Capacitance

| | | | | Figures"

| | | | VOLTAGE RATING:

| | | | A = 50 volts

| | | | V = 150 volts

| | | | C = 200 volts

| | | | E = 400 volts

| | | CHARACTERISTIC:

| | | R = -55 degrees to +85 degrees C

| | | N = -55 degrees to +125 degrees C

| | CIRCUIT:

| | 1 or 3 (based on table and drawing)

| TERMINAL:

| A = Axial wire-lead

| B = Solder lug (non-removable)

STYLE:

CHR plus 2 digit number representing Shape

(i.e., CHR09, CHR49)

Paper/Plastic Film (cont.)

CQ MIL-C-19978

CQ09 A 1 M C 152 K 1

VIBRATION GRADE:
1 = Frequency range 10 to 55Hz incl.
3 = Frequency range 10 to 2,000Hz incl., Acceleration 15G

CAPACITANCE TOLERANCE:
F = +/- 1%
G = +/- 2%
J = +/- 5%
K = +/- 10%

CAPACITANCE:
See "Notes regarding Capacitance Figures"

VOLTAGE:

A = 50 volts	L = 3,000 volts
Z = 30 volts	K = 2,500 volts
B = 100 volts	M = 4,000 volts
C = 200 volts	N = 5,000 volts
E = 400 volts	P = 6,000 volts
F = 600 volts	R = 7,500 volts
G = 1,000 volts	S = 10,000 volts
H = 1,500 volts	T = 12,500 volts
J = 2,000 volts	U = 25,000 volts

CHARACTERISTIC:
E, P, K, M, T, Q, S, or L (based on extensive table)

CIRCUIT:
1 or 3 (based on table and drawings)

TERMINAL:
A = Axial wire lead
B = Solder lug (non-removable)
C = Threaded stud and nuts
D = Pillar insulator for use at altitudes up to 7,500 ft
E = Pillar insulator for use at altitudes up to 50,000 ft
F = radial wire lead
G = Radial pin

NON-ER STYLE:
CQ plus 2 digit number representing Shape and Size
(i.e., CQ07, CQ09, CQ13, CQ29, CQ32, CQ33)

CQR MIL-C-19978

CQR09 A 1 M C 152 K 1 M

- FAILURE RATE:
  - M = 1.0% / 1,000 hr
  - P = 0.1% / 1,000 hr
  - R = 0.01% / 1,000 hr
  - S = 0.001% / 1,000 hr
- VIBRATION GRADE:
  - 1 = Frequency range 10 to 55Hz incl.
  - 3 = Frequency range 10 to 2,000Hz incl., Acceleration 15G
- CAPACITANCE TOLERANCE:
  - F = +/- 1%
  - G = +/- 2%
  - J = +/- 5%
  - K = +/- 10%
- CAPACITANCE:
  - See "Notes regarding Capacitance Figures"
- VOLTAGE:

A = 50 volts	L = 3,000 volts
Z = 30 volts	K = 2,500 volts
B = 100 volts	M = 4,000 volts
C = 200 volts	N = 5,000 volts
E = 400 volts	P = 6,000 volts
F = 600 volts	R = 7,500 volts
G = 1,000 volts	S = 10,000 volts
H = 1,500 volts	T = 12,500 volts
J = 2,000 volts	U = 25,000 volts

- CHARACTERISTIC
  - E, P, K, M, T, Q, S, or L (based on extensive table)
- CIRCUIT
  - 1 or 3 (based on table and drawings)
- TERMINAL
  - A = Axial wire lead
  - B = Solder lug (non-removable)
  - C = Threaded stud and nuts
  - D = Pillar insulator for use at altitudes up to 7,500 ft
  - E = Pillar insulator for use at altitudes up to 50,000 ft
  - F = radial wire lead
- ER STYLE
  - G = Radial pin

CQR plus 2 digit number representing Shape and Size (i.e., CQR07, CQR09, CQR12, CQR13, CQR29, CQR32, CQR33)

Paper/Plastic Film (cont.)

CFR MIL-C-55514

CFR02 A M C 682 J M

| | | | | | |

| | | | | | FAILURE RATE LEVEL:

| | | | | | M = 1.0% / 1,000 hr

| | | | | | P = 0.1% / 1,000 hr

| | | | | | R = 0.01% / 1,000 hr

| | | | | | S = 0.001% / 1,000 hr

| | | | | CAPACITANCE TOLERANCE:

| | | | | F = +/- 1%

| | | | | G = +/- 2%

| | | | | J = +/- 5%

| | | | | K = +/- 10%

| | | | CAPACITANCE:

| | | | See "Notes regarding Capacitance Figures"

| | | VOLTAGE:

| | | A = 50 volts, dc

| | | B = 100 volts, dc

| | | C = 200 volts, dc

| | | D = 300 volts, dc

| | | E = 400 volts, dc

| | | F = 600 volts, dc

| | | G = 75 volts, dc

| | | H = 150 volts, dc

| | | J = 25 volts, dc

| | | K = 250 volts, dc

| | CHARACTERISTIC:

| | M, N, Q, R, or S (based on extensive table

| | outlining Dielectric material, Electrode, and

| | Operating temperature range)

| TERMINAL:

| A = Axial wire-lead

| R = Radial wire-lead

STYLE:

CFR plus 2 digit number

(i.e., CRF02, CFR04, CFR05, CRF06, CFR12)

Paper/Plastic Film (cont.)

CRH MIL-C-83421

CRH01

|

|

STYLE:

CRH plus 2 digit number representing various characteristics

(i.e., CRH01, CRH02, CRH03, CRH04, CRH05, CRH06, CRH07, CRH08, CRH09, CRH00)

Mica

CM MIL-C-5

CM15 E D 100 J P 3

| | | | | | |

| | | | | | VIBRATION GRADE:

| | | | | | 3 = 10 to 2,000 Hertz

| | | | | TEMPERATURE RANGE:

| | | | | P = -55 degrees to +150 degreesC

| | | | | O = -55 degrees to +125 degreesC

| | | | CAPACITANCE TOLERANCE:

| | | | F = +/- 1%

| | | | G = +/- 2%

| | | | J = +/- 5%

| | | CAPACITANCE:

| | | See "Notes regarding Capacitance Figures"

| | VOLTAGE RATING:

| | C = 300 volts

| | D = 500 volts

| | E = 600 volts

| | G = 1,200 volts

| | K = 2,500 volts

| CHARACTERISTIC:

| B, C, E, or F (based on extensive table outlining

| Temperature Coefficient and Capacitance Drift)

STYLE:

CM plus 2 digit number referencing Shape and Dimensions

(i.e., CM15, CM20, CM30, CM35, CM45, CM50)

Mica (cont.)

CB MIL-C-10950

CB50 R B 050 K

| | | | |

| | | | CAPACITANCE TOLERANCE:

| | | | F = +/- 1%

| | | | G = +/- 2%

| | | | J = +/- 5%

| | | | K = +/- 10%

| | | CAPACTIANCE:

| | | See "Notes regarding Capacitance Figures"

| | CHARACTERISTIC:

| | B, D, E, or F (based on extensive table outlining

| | Temperature Coefficient and Capacitance drift)

| TERMINAL ASSEMBLY:

| P = Single L

| R = Double L

STYLE:

CB plus 2 digit number referencing Shape, Dimensions, and Operating Temperature Range (i.e., CB50, CB55, CB56, CB57, CB60, CB61, CB62, CB65, CB66, CB67)

Mica (cont.)

CMR MIL-C-39001

CMR03 C 1R0 D O C M

| | | | | | |

| | | | | | FAILURE RATE LEVEL:

| | | | | | M = 1.0% / 1,000 hr

| | | | | | P = 0.1% / 1,000 hr

| | | | | | R = 0.01% / 1,000 hr

| | | | | | S = 0.001% / 1,000 hr

| | | | | RATED VOLTAGE:

| | | | | Y = 50 volts, dc

| | | | | A = 100 volts, dc

| | | | | C = 300 volts, dc

| | | | | D = 500 volts, dc

| | | | OPERATING TEMPERATURE RANGE:

| | | | O = -55 degrees to +125 degrees C

| | | | P = -55 degrees to +150 degrees C

| | | CAPACITANCE TOLERANCE:

| | | D = 0.5pF

| | | F = 1%

| | | G = 2%

| | | J = 5%

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| CHARACTERISTIC:

| C = Temp coefficient -200 to +200 ppm / degrees C and Capacitance

| drift of +/- (0.5% + 0.1 pF)

| E = Temp coefficient -20 to +100 ppm / degrees C and Capacitance

| drift of +/- (0.1% + 0.1 pF)

| F = Temp coefficient 0 to +70 ppm / degrees C and Capacitance

| drift of +/- (0.05% + 0.1 pF)

STYLE:

CMR plus 2 digit number representing Shape and Dimensions

(i.e., CMR03, CMR04, CMR05, CMR06, CMR07, CMR08)

Glass

CY MIL-C-11272

CY10 C 0R5 C

| | | | |

| | | | CAPACITANCE TOLERANCE:

| | | | C = +/- 0.25pF

| | | | D = +/- 0.50pF

| | | | F = +/- 1%

| | | | G = +/- 2%

| | | | J = +/- 5%

| | | CAPACITANCE:

| | | See "Notes regarding Capacitance Figures"

| | 0PERATING TEMPERATURE RANGE:

| | | C = -55 to +125 degreesC

STYLE:

CY plus 2 digit number representing Shape and Dimensions

(i.e., CY10, CY15, CY20, CY30, CY12, CY13, CY16, CY17, CY21, CY22, CY31, CY32, CY06, CY07, CY08)

Glass (cont.)

CYR MIL-C-23269

CYR10 C 100 J M

| | | | |

| | | | FAILURE RATE LEVEL:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | CAPACITANCE TOLERANCE:

| | | C = +/- 0.25 pF

| | | D = +/- 0.50 pF

| | | F = 1%

| | | G = 2%

| | | J = 5%

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| CHARACTERISTIC:

| C = Temp coefficient of 140 +/- 25 (parts/million/ degrees C) and

| Capacitance drift (-55 degrees to +125 degrees C) of 0.1% or 0.1pf,

| whichever is greater

| D = Temp coefficient of 105 +/- 25 (parts/million/ degrees C) and

| Capacitance drift (-55 degrees to +125 degreesC) of 0.1% or 0.1pf,

| whichever is greater

STYLE:

CYR plus 2 digit number representing Shape and Dimensions

(i.e., CYR10, CYR15, CYR20, CYR30, CYR13, CYR17, CYR22, CYR32, CYR41, CYR42, CYR43, CYR51, CYR52, CYR53)

Ceramic

CC MIL-C-20

CC75 CH 1R0 C

| | | |

| | | CAPACITANCE TOLERANCE:

| | | B = + 0.1 pF

| | | C = + 0.25 pF

| | | D = + 0.5 pF

| | | F = + 1%

| | | G = + 2%

| | | J = + 5%

| | | K = + 10%

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| CHARACTERISTIC:

| Two-letter symbol based on extensive table. Symbols are

| as follows: AH, AJ, AK, CF, CG, CH, CJ, CK, HF, HG, HH,

| HC, HK, LF, LG, LH, LJ, LK, PF, PG, PH, PJ, PK, RF, RG,

| RH, RJ, RK, SG, SH, SJ, SK, TG, TH, TJ, TK, UG, UH, UJ, UK)

NON-ER STYLE:

CC plus 2-digit number representing Shape and Dimension

(i.e., CC75, CC76, CC77, CC78, CC79, CC81, CC82, CC83, CC05,

CC09, CC06, CC07, CC08, CC15, CC16, CC17, CC18, CC54, CC55,

CC56, CC57, CC13, CC14, CC90)

Ceramic (cont.)

CCR MIL-C-20

CCR75 CH 1R0 C M

| | | | |

| | | | FAILURE RATE LEVEL:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | CAPACITANCE TOLERANCE:

| | | B = + 0.1 pF

| | | C = + 0.25 pF

| | | D = + 0.5 pF

| | | F = + 1%

| | | G = + 2%

| | | J = + 5%

| | | K = + 10%

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| CHARACTERISTIC:

| Two-letter symbol based on extensive table. Symbols are

| as follows: AH, AJ, AK, CF, CG, CH, CJ, CK, HF, HG, HH,

| HC, HK, LF, LG, LH, LJ, LK, PF, PG, PH, PJ, PK, RF, RG,

| RH, RJ, RK, SG, SH, SJ, SK, TG, TH, TJ, TK, UG, UH, UJ, UK)

ER STYLE:

CCR plus 2 digit number representing Shape and Dimension

(i.e., CCR75, CCR76, CCR77, CCR78, CCR79, CCR81, CCR82, CCR83, CCR05, CCR09, CCR06, CCR07, CCR08, CCR15, CCR16, CCR17, CCR18, CCR54, CCR55, CCR56, CCR57, CCR13, CCR14, CCR90)

Ceramic (cont.)

CK MIL-C-11015

CK60 BX 2R2 K
| | | |
| | | CAPACITANCE TOLERANCE:
| | | K = +/- 10%
| | | M = +/- 20%
| | CAPACITANCE:
| | See "Notes regarding Capacitance Figures"
| RATED TEMPERATURE:
| AX = -55 degrees to +85 degrees C
| BX = -55 degrees to +125 degrees C
| CX = -55 degrees to +150 degrees C
STYLE:
CK plus 2 digit number representing Shape and Dimensions
(i.e., CK60, CK62, CK70, CK80)

CKR MIL-C-39014

CKR05 CW 100 K M
| | | | |
| | | | FAILURE RATE LEVEL:
| | | | M = 1.0% / 1,000 hr
| | | | P = 0.1% / 1,000 hr
| | | | R = 0.01% / 1,000 hr
| | | | S = 0.001% / 1,000 hr
| | | CAPACITANCE TOLERANCE:
| | | K = +/- 10%
| | | M = +/- 20%
| | CAPACITANCE:
| | See "Notes regarding Capacitance Figures"
| OPERATING TEMPERATURE RANGE AND VOLTAGE TEMPERATURE LIMITS:
| Two letters representing Operating Temp Range (1st) and
| Voltage Temperature Limits (2nd)
| First Letter= A = Oper Temp -55 degrees to +85 degrees C
| B = Oper Temp -55 degrees to +125 degrees C
| C = Oper temp -55 degrees to +150 degrees C
| Second Letter= W or X (based on detailed table)
STYLE:
CKR plus 2 digit number representing Shape
(i.e., CKR05, CKR06, CKR11, CKR12, CKR14, CKR15, CKR22, CKR23)

Ceramic (cont.)

CDR MIL-C-55681

CDR01 BP 100 B J S M

| | | | | | |

| | | | | | FAILURE RATE LEVEL:

| | | | | | M = 1.0% / 1,000 hr

| | | | | | P = 0.1% / 1,000 hr

| | | | | | R = 0.01% / 1,000 hr

| | | | | | S = 0.001% / 1,000 hr

| | | | | TERMINATION FINISH:

| | | | | M = Palladium-silver

| | | | | N = Silver-nickel-gold

| | | | | P = Silver-copper-gold

| | | | | Q = Palladium-gold

| | | | | S = Solder coated, final

| | | | | T = Silver

| | | | | U = Base metallization; Barrier

| | | | | metal, solder coated

| | | | | W = Base metallization; Barrier

| | | | | metal, tinned

| | | | CAPACITANCE TOLERANCE:

| | | | B = +/- .10 pF

| | | | C = +/- .25 pF

| | | | D = +/- .50 pF

| | | | F = +/- 1%

| | | | G = +/- 2%

| | | | J = +/- 5%

| | | | K = +/- 10%

| | | | M = +/- 20%

| | | RATED VOLTAGE:

| | | A = 50 B = 100 C = 200

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| RATED TEMPERATURE AND VOLTAGE TEMPERATURE LIMITS:

| BG, BP, or BX (based on detailed table)

STYLE:

CDR plus 2 digit number representing Dimensions

(i.e., CDR01, CDR02, CDR03, CDR04)

Electrolytic

CE MIL-C-62

CE13 C 100 Q

| | | |

| | | VOLTAGE:

| | | Q = DC rated voltage of 400, DC surge voltage

| | | of 450, and Cap. Tolerance of -10, +50%

| | | R = DC rated voltage of 450, DC surge voltage

| | | of 500, and Cap. Tolerance of -10, +50%

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| CHARACTERISTIC:

| C = -40 degrees to +85 degrees C

STYLE:

CE plus 2 digit number representing Shape and Dimensions

(i.e., CE13, CE71)

Electrolytic (cont.)

CL MIL-C-3965

CL10 B C 700 T P G

| | | | | | |

| | | | | | TYPE OF SEAL:

| | | | | | G = Hermetic

| | | | | | E = Non-hermetic

| | | | | CONSTRUCTION:

| | | | | P = Polarized

| | | | | N = Non-polarized

| | | | CAPACITANCE TOLERANCE:

| | | | J = +/- 5%

| | | | K = +/- 10%

| | | | L = +/- 15%

| | | | M = +/- 20%

| | | | S = +30%, -15%

| | | | T = +50%, -15%

| | | | U = +75%, -15%

| | | CAPACITANCE:

| | | See "Notes regarding Capacitance Figures"

| | VOLTAGE:

| | A = 3 volts J = 50 volts S = 270 volts

| | B = 6 volts K = 60 volts T = 360 volts

| | C = 8 volts L = 75 volts U = 450 volts

| | D = 10 volts M = 90 volts V = 540 volts

| | E = 15 volts N = 100 volts W = 630 volts

| | F = 20 volts O = 250 volts X = 300 volts

| | G = 25 volts P = 125 volts Y = 375 volts

| | H = 30 volts Q = 150 volts Z = 200 volts

| | I = 112 volts R = 180 volts

| CHARACTERISTIC:

| B = Rated temp range of -55 degrees to +85 degrees C

STYLE:

CL plus 2 digit number representing Design Features

(i.e., CL10)

Electrolytic (cont.)

CSR MIL-C-39003

CSR13 B 565 K M

| | | | |

| | | | FAILURE RATE LEVEL:

| | | | M = 1.0% / 1,000 hr

| | | | P = 0.1% / 1,000 hr

| | | | R = 0.01% / 1,000 hr

| | | | S = 0.001% / 1,000 hr

| | | CAPACITANCE TOLERANCE:

| | | K = +/- 10%

| | | M = +/- 20%

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| DC RATED AND SURGE VOLTAGES:

| B, C, D, E, F, G, H, or J (based on extensive table

| outlining DC rated voltage and DC surge voltage at 85 degrees C

| and 125 degrees C

STYLE:

CSR plus 2 digit number representing Design Features

(i.e., CSR13, CSR91, CSR21)

Electrolytic (cont.)

CLR MIL-C-39006

CLR21 C D 150 U M

| | | | | |

| | | | | FAILURE RATE LEVEL:

| | | | | M = 1.0% / 1,000 hr

| | | | | P = 0.1% / 1,000 hr

| | | | | R = 0.01% / 1,000 hr

| | | | | S = 0.001% / 1,000 hr

| | | | CAPACITANCE TOLERANCE:

| | | | K = +/- 10%

| | | | M = +/- 20%

| | | | S = +30%, -15%

| | | | T = +50%, -15%

| | | | U = +75%, -15%

| | | CAPACITANCE:

| | | See "Notes regarding Capacitance Figures"

| | VOLTAGE:

| | A single letter represented by A - Z (based

| | on extensive table outlining D.C. working voltage

| | at 125 degrees C and Surge voltage at 125 degrees C

| CHARACTERISTIC:

| C = Operating temp range of -55 degrees to +125 degrees C

STYLE:

CLR plus 2 digit number representing Shape

(i.e., CLR21, CLR25, CLR27, CLR35, CLR37, CLR79)

Electrolytic (cont.)

CU MIL-C-39018

CU12 C D 101 S P 8

| | | | | | |

| | | | | | VIBRATION GRADE:

| | | | | | 1 = 10 to 55 cycles per second

| | | | | | 8 = 10 to 2,000 cycles per second

| | | | | CONSTRUCTION:

| | | | | N = Non-polarized

| | | | | P = Polarized

| | | | CAPACITANCE TOLERANCE:

| | | | S = -10% +30%

| | | | T = -10% +50%

| | | | U = -10% +75%

| | | CAPACITANCE:

| | | See "Notes regarding Capacitance Figures"

| | VOLTAGE

| | B, D, E, H, J, L, N, Q, R, or S (based on extensive table)

| CHARACTERISTIC:

| B = Operating temp range of -55 degrees to +85 degrees C

| C = Operating temp range of -55 degrees to +85 degrees C

STYLE:

CU plus 2 digit number referencing Shape, Dimensions, & Insulation (i.e., CU12)

Electrolytic (cont.)

CUR MIL-C-39018

CUR13 C D 101 S P 8

| | | | | | |

| | | | | | VIBRATION GRADE:

| | | | | | 1 = 10 to 55 cycles per second

| | | | | | 8 = 10 to 2,000 cycles per second

| | | | | CONSTRUCTION:

| | | | | N = Non-polarized

| | | | | P = Polarized

| | | | CAPACITANCE TOLERANCE:

| | | | S = -10% +30%

| | | | T = -10% +50%

| | | | U = -10% +75%

| | | CAPACITANCE:

| | | See "Notes regarding Capacitance Figures"

| | VOLTAGE

| | B, D, E, H, J, L, N, Q, R, or S (based on extensive table)

| CHARACTERISTIC:

| B = Operating temp range of -55 degrees to +85 degrees C

| C = Operating temp range of -55 degrees to +85 degrees C

STYLE:

CUR plus 2 digit number referencing Shape, Dimensions, & Insulation

(i.e., CUR13, CUR17, CUR19, CUR71, CUR91)

Electrolytic (cont.)

CWR MIL-C-55365

CWR02 B A 225 J M

| | | | | |

| | | | | FAILURE RATE LEVEL:

| | | | | M = 1.0% / 1,000 hr

| | | | | P = 0.1% / 1,000 hr

| | | | | R = 0.01% / 1,000 hr

| | | | | S = 0.001% / 1,000 hr

| | | | CAPACITANCE TOLERANCE:

| | | | J = +/- 5%

| | | | K = +/- 10%

| | | | M = +/- 20%

| | | CAPACITANCE:

| | | See "Notes regarding Capacitance Figures"

| | TERMINATION FINISH:

| | A = Solder-coated nickel

| | B = Gold

| | C = Solder-coated gold

| | D = Solder-coated alloy 725

| VOLTAGE:

| B, C, D, F, H, J, K, L, M, or N (based on extensive

| table outlining Rated, Derated, and Surge voltage)

STYLE:

CWR plus 2 digit number representing Design

(i.e., CWR02, CWR03, CWR04, CWR06)

Variable

CV MIL-C-81

CV11 A 070
| | |
| | CAPACITANCE:
| | See "Notes regarding Capacitance Figures"
| CHARACTERISTIC:
| A, B, C, D, or E (based on extensive table outlining
| relative capacitance change limits with temperature)
STYLE:
CV plus 2 digit number representing Shape and Dimensions
(i.e., CV11, CV21, CV31)

CT MIL-C-92

CT06 F 004 J
| | | |
| | | ROTATIONAL LIFE:
| | | J = 250 cycles
| | | M = 10,000 cycles
| | CAPACITANCE:
| | See "Notes regarding Capacitance Figures"
| VOLTAGE:
| A = 50 volts
| B = 100 volts
| C = 300 volts
| D = 350 volts
| E = 500 volts
| F = 600 volts
| G = 700 volts
STYLE:
CT plus 2 digit number representing Shaft Type and Length
(i.e., CT06)

Variable (cont.)

PC MIL-C-14409

PC38 Q 1R8

| | |

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| CHARACTERISTIC:

| G, H, J, K, L, Q, or T (based on extensive table outlining

| Operating temp range, Temperature coefficient, and

| Capacitance drift)

STYLE:

PC plus 2 digit number representing Shape

(i.e., PC17, PC18, PC19, PC21, PC22, PC23, PC24, PC25, PC26,

PC30, PC32, PC38, PC39, PC40, PC42, PC43, PC48, PC52)

Vacuum/Gas

CG MIL-C-23183

CG20 N 050-250 C

| | | |

| | | CURRENT:

| | | A = 10 Amperes M = 60 Amperes

| | | C = 20 Amperes N = 75 Amperes

| | | E = 30 Amperes P = 100 Amperes

| | | G = 40 Amperes Q = 125 Amperes

| | | H = 42 Amperes R = 45 Amperes

| | | K = 50 Amperes S = 150 Amperes

| | CAPACITANCE:

| | See "Notes regarding Capacitance Figures"

| VOLTAGE:

| B = 2kV L = 20kV

| C = 3kV N = 30kV

| E = 5kV P = 35kV

| F = 7.5kV R = 45kV

| G = 10kV T = 55kV

| H = 12.5kV U = 40kV

| J = 15kV V = 6kV

STYLE:

CG plus 2 digit number referencing Shape of Case

(i.e., CG10, CG20, CG15, CG41, CG60, CG62, CG65, CG66, CG21, CG30, CG31, CG32, CG40, CG42, CG43, CG44, CG63, CG64, CG67, CG50, CG51)

NOTES REGARDING CAPACITANCE

The nominal capacitance of fixed capacitors expressed in picofarads (pF) has a tolerance of (10 percent, and is identified by a three-digit number; the first two digits represent significant figures and the last digit specifies the number of zeros to follow. When nominal value is less than 10 pF, the letter "R" shall be used to indicate the decimal point and the succeeding digit(s) of the group shall represent significant figures(s). For example:

1R0 indicates 1.0 pF

R75 indicates 0.75 pF

0R5 indicates 0.5 pF

100 indicates 10 pF

For CE, CL, CLR, CM, and CMR Capacitors, the above information is true with the exception of units. For these Capacitors only, capacitance is expressed in microfarads (uF).

For CT Capacitors, a three-digit number identifies the nominal maximum capacitance value expressed in picofarads (pF). For values of 1 to 9 pF, inclusive, the first two digits shall be zeros, and for values of 10 uuF to 99 pF inclusive, the first digit shall be zero.