REVISIONS

DOC. NO. SPC-F004 * Effective: 12/21/98 * DCP No: 680

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
721	B	REVISED LEAKAGE CURRENT	DJC	3/8/99	JC	3/9/99	JC	3/9/99
1114	C	Updated Parts List	HYO	8/29/01	JC	8/29/01	JC	8/29/01

FEATURES:

1. WIDE CV VALUE RANGE FOR GENERAL PURPOSE.
2. SAFETY VENT CONSTRUCTION.
3. 2000 HOURS AT 85°C.

CHARACTERISTICS:

ITEM	PERFORMANCE	
Operating Temperature Range	-40°C to 85°C	-25°C to 85°C
Rated Working Voltage Range	6.3 - 100 VDC	160 - 450 VDC
Nominal Capacitance Range	0.1 - 22000 µF	0.47 - 820 µF
Capacitance Tolerance	±20% (at 20°C, 120 Hz)	
Leakage Current	I = 0.01CV or 3µA, whichever is greater after 3 minutes.	I ≤ 0.03CV + 30µA Max.
	where I = Leakage Current in µA; C = Rated capacitance in µF; V = Working voltage in volts	

Dissipation Factor (Tan δ) (At 20°C, 120 Hz)

Working Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
Tan δ Max.	0.22	0.2	0.17	0.15	0.12	0.1	0.09	0.08	0.2	0.2	0.18	0.2	0.2	0.2

For capacitors whose capacitance exceeds 1,000 µF, the specification of Tan δ is increased by 0.02 for every addition of 1,000 µF.

Ripple Current

Refer to standard products table (120 Hz, +85°). Correction factor for frequency.

Frequency (Hz)	50/60	120	1K	10K
Correction factor (multiplier)	0.7	1	1.3	1.7

Low Temperature Characteristics (at 120 Hz)

For capacitance value > 1000 µF: Add 0.5 per 1000 µF for -25°C/+25°C.
Add 1.0 per 1000 µF for -40°C/+20°C.

Working Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
-25°C/+20°C	4	3	2	2	2	2	2	2	2	3	3	5	12	15
-40°C/+20°C	8	6	4	4	3	3	3	3						

High Temperature Loading

After 2000 hrs application of DC rated working voltage at +85°C, the capacitor shall meet the following limits: Post test requirements at +20°C.

Leakage Current	≤ the initial specified value
Capacitance change	≤ ±20% of initial specified value
Dissipation Factor (Tan δ)	≤ 150% of initial specified value

Shelf Life

After storage at 85°C for 1000 hours with no voltage applied. Post test requirements at 20°C same limits for high temperature loading.

SPC-F004.DWG

multicomp

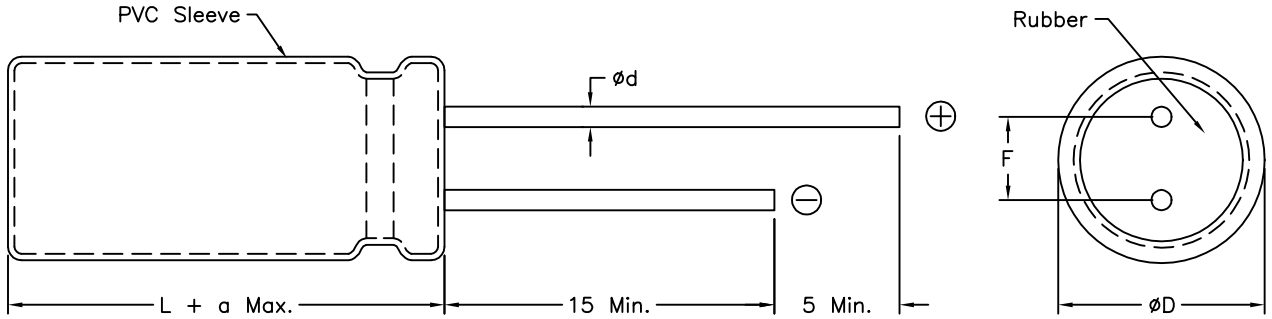
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
DANIEL CAREY	8/4/98
CHECKED BY:	DATE:
JOHN COLE	8/11/98
APPROVED BY:	DATE:
JEFF MCVICKER	8/12/98

DRAWING TITLE: GENERAL PURPOSE RADIAL CAPACITORS

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	TA-136	TA-136.DWG	C

SCALE: NTS | U.O.M.: Millimeters | SHEET: 1 OF 3



$L \leq 16 \rightarrow a = 1$

$L > 16 \rightarrow a = 2$

Multicomp Type No.	Working Voltage (V)	Capacitance (µF)	Max. Ripple Current @ 85°C, 120 Hz	Case Size (mm)		Lead Sapcing (F) ± 0.5	Lead Diameter (Ød) ± 0.02
				Ø D	L		
MCR16V106M5X11	16	10	45	5	11	2	0.5
MCR16V226M5X11	16	22	60	5	11	2	0.5
MCR16V336M5X11	16	33	85	5	11	2	0.5
MCR16V476M5X11	16	47	100	5	11	2	0.5
MCR16V107M6.3X11	16	100	170	6.3	11	2.5	0.5
MCR16V227M6.3X11	16	220	280	6.3	11	2.5	0.5
MCR16V337M8X11	16	330	360	8	11	3.5	0.6
MCR16V477MX811	16	470	460	8	11	3.5	0.6
MCR16V108M10X16	16	1000	760	10	16	5	0.6
MCR16V228M13X21	16	2200	1250	13	21	5	0.6
MCR16V478M16X26	16	4700	1960	16	26	7.5	0.8
MCR25V106M5X11	25	10	45	5	11	2	0.5
MCR25V226M5X11	25	22	70	5	11	2	0.5
MCR25V476M5X11	25	47	120	5	11	2	0.5
MCR25V107M6.3X11	25	100	180	6.3	11	2.5	0.5
MCR25V227M8X11	25	220	320	8	11	3.5	0.6
MCR25V477M10X15	25	470	540	10	16	5	0.6
MCR25V108M10X21	25	1000	900	10	21	5	0.6
MCR35V475M5X11	35	4.7	35	5	11	2	0.5
MCR35V106M5X11	35	10	50	5	11	2	0.5
MCR35V226M5X11	35	22	80	5	11	2	0.5
MCR35V336M5X11	35	33	105	5	11	2	0.5
MCR35V476M6.3X11	35	47	135	6.3	11	2.5	0.5
MCR35V107M8X11	35	100	220	8	11	3.5	0.6
MCR35V227M10X13	35	220	380	10	13	5	0.6
MCR35V337M10X16	35	330	480	10	16	5	0.6
MCR35V477M10X21	35	470	620	10	21	5	0.6
MCR35V108M13X21	35	1000	1040	13	21	5	0.6
MCR35V228M16X32	35	2200	1700	16	32	7.5	0.8
MCR50V474M5X11	50	0.47	8	5	11	2	0.5
MCR50V105M5X11	50	1	13	5	11	2	0.5

Multicomp Type No.	Working Voltage (V)	Capacitance (µF)	Max. Ripple Current @ 85°C, 120 Hz	Case Size (mm)		Lead Sapcing (F) ± 0.5	Lead Diameter (Ød) ± 0.02
				Ø D	L		
MCR50V225M5X11	50	2.2	21	5	11	2	0.5
MCR50V475M5X11	50	4.7	40	5	11	2	0.5
MCR50V106M5X11	50	10	60	5	11	2	0.5
MCR50V226M5X11	50	22	90	5	11	2	0.5
MCR50V476M6.3X11	50	47	150	6.3	11	2.5	0.5
MCR50V107M8X11	50	100	250	8	11	3.5	0.6
MCR50V227M10X16	50	220	430	10	16	5	0.6
MCR50V477M13X21	50	470	750	13	21	5	0.6
MCR50V108M16X26	50	1000	1260	16	26	7.5	0.8
MCR63V105M5X11	63	1	16	5	11	2	0.5
MCR63V225M5X11	63	2.2	27	5	11	2	0.5
MCR63V475M5X11	63	4.7	40	5	11	2	0.5
MCR63V106M5X11	63	10	65	5	11	2	0.5
MCR63V226M6.3X11	63	22	110	6.3	11	2.5	0.5
MCR63V476M8X11	63	47	180	8	11	3.5	0.6
MCR63V107M10X13	63	100	280	10	13	5	0.6
MCR63V22MX1021	63	220	490	10	21	5	0.6
MCR63V477M13X26	63	470	880	13	26	5	0.6
MCR63V108M16X32	63	1000	1400	16	32	7.5	0.8
MCR100V105M5X11	100	1	16	5	11	2	0.5
MCR100V225M5X11	100	2.2	27	5	11	2	0.5
MCR100V475M5X11	100	4.7	45	5	11	2	0.5
MCR100V106M6.3X11	100	10	75	6.3	11	2.5	0.5
MCR100V226M8X11	100	22	130	8	11	3.5	0.6
MCR100V476M10X16	100	47	230	10	16	5	0.6
MCR100V107M13X21	100	100	380	13	21	5	0.6
MCR100V227M16X26	100	220	680	16	26	7.5	0.8
MCR100V477M16X32	100	470	1000	16	32	7.5	0.8