

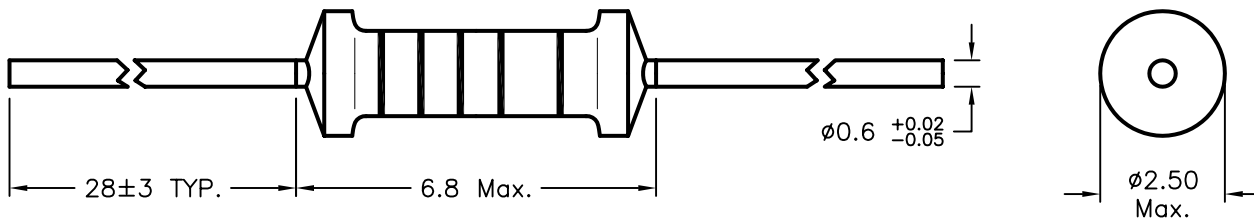
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1861	A	RELEASED	BYF	10/31/05	HO	10/31/05	JWM	10/31/05



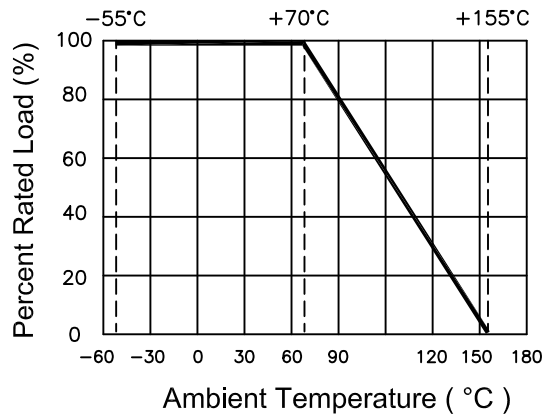
Layer Name	Material
Basic Body	Rod Type Ceramics
Resistance Film	Metal Film
End Cap	Steel (Tin plated iron surface)
Lead Wire	Annealed copper wire (Electrosolder plated surface) Pb Free
Joint	By Welding
Coating	Insulated resin ( Color : Sky blue )
Color Code	Epoxy Resin

**GENERAL SPECIFICATIONS:**

- Rating Wattage @ 70°C: 0.25W
- Dielectric Withstanding Voltage: 500V
- Maximum Working Voltage: 250V
- Maximum Overload Voltage: 500V
- Tolerance: ±1%
- T.C.R.: ±50PPM/°C
- Resistance Range: (See parts table)
- Rated Ambient Temp.: 70°C
- Operating Temp. Range: -55°C to +155°C



**Derating Curve**



SPC-F004.DWG

<b>TOLERANCES:</b> UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.	<b>DRAWN BY:</b> BASAM YOUSIF	<b>DATE:</b> 10/31/05	<b>DRAWING TITLE:</b> RoHS Compliant Precision Metal Film Resistors, 1/4 W, 1%			
	<b>CHECKED BY:</b> HISHAM ODISH	<b>DATE:</b> 10/31/05	<b>SIZE</b> A	<b>DWG. NO.</b> TA-666	<b>ELECTRONIC FILE</b> TA-666.DWG	<b>REV</b> A
	<b>APPROVED BY:</b> JEFF MCVICKER	<b>DATE:</b> 10/31/05	<b>SCALE:</b> NTS		<b>U.O.M.:</b> MILLIMETERS	
				<b>SHEET:</b> 1 OF 6		

Characteristics	Limits	Test Methods (JIS C 5201-1)															
DC. Resistance	Must be within the specified tolerance	5.1 The limit of error of measuring apparatus shall not exceed allowable range or 1% of resistance tolerance															
Temperature coefficient	Within the temperature coefficient specified below:  50 PPM/°C Maximum	5.2 Natural resistance change per temp. degree centigrade. $\frac{R_2 - R_1}{R_1(t_2 - t_1)} \times 10^6 \text{ (PPM/°C)}$ R <sub>1</sub> : Resistance value at room temperature (t <sub>1</sub> ) R <sub>2</sub> : Resistance value at room temp. plus 100°C (t <sub>2</sub> )															
Short time overload	Resistance change rate is ±(0.5% +0.05Ω) Max. with No evidence of mechanical damage.	5.5 Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds															
Dielectric withstanding voltage	No evidence of flashover mechanical damage, arcing or insulation breakdown.	5.7 Resistors shall be clamped in the trough of a 90° metallic V-block and shall be tested at AC potential respectively specified in sheet '1'															
Pulse overload	Resistance change rate is ±(1% +0.05Ω) Max. with no evidence of mechanical damage.	5.8 Resistance change after 10,000 cycles (1 second "ON", 25 seconds "OFF") at 4 times * RCWV.															
Terminal strength	No evidence of mechanical damage.	6.1 Direct load: Resistance to a 2.5 kgs direct load for 10 seconds in the direction of the longitudinal axis of the terminal leads. Twist test: Terminal leads shall be bent through 90° at a point of about 6mm from the body of the resistor and shall be rotated through 360° about the original axis of the bent terminal in alternating directions for a total of 3 rotations.															
Resistance to soldering heat	Resistance change rate is ±(1% +0.05Ω) Max. with no evidence of mechanical damage.	6.4 Permanent resistance change when leads immersed to 3.2 to 4.8mm from the body in 350°C ±10°C solder for 3 ±0.5 seconds.															
Solderability	95% coverage Min.	6.5 The area covered with a new, smooth, clean, shiny and continuous surface free from concentrated pinholes. Test temperature of solder: 245°C ±3°C Dwell time in solder: 2-3 seconds															
Resistance to solvent	No deterioration of protective coating and markings.	6.9 Specimens shall be immersed in a bath of trichroethane completely for 3 mins with ultrasonic.															
Temperature cycling	Resistance change rate is ±(1% +0.05Ω) Max. with no evidence of mechanical damage.	7.4 Resistance change after continuous five cycles for duty shown below : <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Step</th> <th>Temperature</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-55°C ±3°C</td> <td>30</td> </tr> <tr> <td>2</td> <td>Room Temp.</td> <td>10 ~ 15</td> </tr> <tr> <td>3</td> <td>+155°C ±2°C</td> <td>30</td> </tr> <tr> <td>4</td> <td>Room Temp.</td> <td>10 ~ 15</td> </tr> </tbody> </table>	Step	Temperature	Time (min)	1	-55°C ±3°C	30	2	Room Temp.	10 ~ 15	3	+155°C ±2°C	30	4	Room Temp.	10 ~ 15
Step	Temperature	Time (min)															
1	-55°C ±3°C	30															
2	Room Temp.	10 ~ 15															
3	+155°C ±2°C	30															
4	Room Temp.	10 ~ 15															
Load life in humidity	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Resistance Value</th> <th>ΔR/R</th> </tr> </thead> <tbody> <tr> <td>Normal type</td> <td>±1.5%</td> </tr> </tbody> </table>	Resistance Value	ΔR/R	Normal type	±1.5%	7.9 Resistance change after 1,000 hours (1.5 hours "ON, 0.5 hour "OFF" ) at * RCWV in humidity test chamber controlled at 40°C±2°C and 90 to 95% relative humidity.											
Resistance Value	ΔR/R																
Normal type	±1.5%																
Load life	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Resistance Value</th> <th>ΔR/R</th> </tr> </thead> <tbody> <tr> <td>Normal type</td> <td>±1.5%</td> </tr> </tbody> </table>	Resistance Value	ΔR/R	Normal type	±1.5%	7.10 Permanent resistance change after 1,000 hours operating at * RCWV with duty cycle of 1.5 hours "on", 0.5 hour "off" at 70°C ±2°C ambient.											
Resistance Value	ΔR/R																
Normal type	±1.5%																

\*RCWV = Rated Continuous Working Voltage =  $\sqrt{\text{Rated Power} \times \text{Resistance Value}}$

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SPC-F004.DWG

SIZE DWG. NO.

A

TA-666

ELECTRONIC FILE

TA-666.DWG

REV

A

DOC. NO. SPC-F004 \* Effective: 7/8/02 \* DCP No: 1398

SCALE: NTS

U.O.M.: Millimeters

SHEET: 2 OF 6

Multicomp Mfr P/N #	Resistance
MCMFOW4FF100JA50	10 ohm
MCMFOW4FF100JT50	10 ohm
MCMFOW4FF102JA50	10.2 ohm
MCMFOW4FF105JA50	10.5 ohm
MCMFOW4FF107JA50	10.7 ohm
MCMFOW4FF110JA50	11 ohm
MCMFOW4FF113JA50	11.3 ohm
MCMFOW4FF115JA50	11.5 ohm
MCMFOW4FF118JA50	11.8 ohm
MCMFOW4FF120JA50	12 ohm
MCMFOW4FF121JA50	12.1 ohm
MCMFOW4FF124JA50	12.4 ohm
MCMFOW4FF127JA50	12.7 ohm
MCMFOW4FF130JA50	13 ohm
MCMFOW4FF133JA50	13.3 ohm
MCMFOW4FF137JA50	13.7 ohm
MCMFOW4FF140JA50	14 ohm
MCMFOW4FF143JA50	14.3 ohm
MCMFOW4FF147JA50	14.7 ohm
MCMFOW4FF150JA50	15 ohm
MCMFOW4FF154JA50	15.4 ohm
MCMFOW4FF158JA50	15.8 ohm
MCMFOW4FF160JA50	16 ohm
MCMFOW4FF162JA50	16.2 ohm
MCMFOW4FF165JA50	16.5 ohm
MCMFOW4FF169JA50	16.9 ohm
MCMFOW4FF174JA50	17.4 ohm
MCMFOW4FF178JA50	17.8 ohm
MCMFOW4FF180JA50	18 ohm
MCMFOW4FF182JA50	18.2 ohm
MCMFOW4FF187JA50	18.7 ohm
MCMFOW4FF191JA50	19.1 ohm
MCMFOW4FF196JA50	19.6 ohm
MCMFOW4FF200JA50	20 ohm
MCMFOW4FF205JA50	20.5 ohm
MCMFOW4FF210JA50	21 ohm
MCMFOW4FF215JA50	21.5 ohm
MCMFOW4FF220JA50	22 ohm
MCMFOW4FF221JA50	22.1 ohm
MCMFOW4FF226JA50	22.6 ohm
MCMFOW4FF232JA50	23.2 ohm
MCMFOW4FF237JA50	23.7 ohm
MCMFOW4FF240JA50	24 ohm
MCMFOW4FF243JA50	24.3 ohm
MCMFOW4FF249JA50	24.9 ohm
MCMFOW4FF255JA50	25.5 ohm
MCMFOW4FF261JA50	26.1 ohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF267JA50	26.7 ohm
MCMFOW4FF270JA50	27 ohm
MCMFOW4FF274JA50	27.4 ohm
MCMFOW4FF287JA50	28.7 ohm
MCMFOW4FF294JA50	29.4 ohm
MCMFOW4FF300JA50	30 ohm
MCMFOW4FF301JA50	30.1 ohm
MCMFOW4FF309JA50	30.9 ohm
MCMFOW4FF316JA50	31.6 ohm
MCMFOW4FF324JA50	32.4 ohm
MCMFOW4FF330JA50	33 ohm
MCMFOW4FF332JA50	33.2 ohm
MCMFOW4FF340JA50	34 ohm
MCMFOW4FF348JA50	34.8 ohm
MCMFOW4FF3572A50	35.7 ohm
MCMFOW4FF357JA50	35.7 ohm
MCMFOW4FF360JA50	36 ohm
MCMFOW4FF365JA50	36.5 ohm
MCMFOW4FF374JA50	37.4 ohm
MCMFOW4FF383JA50	38.3 ohm
MCMFOW4FF390JA50	39 ohm
MCMFOW4FF392JA50	39.2 ohm
MCMFOW4FF402JA50	40.2 ohm
MCMFOW4FF412JA50	41.2 ohm
MCMFOW4FF422JA50	42.2 ohm
MCMFOW4FF430JA50	43 ohm
MCMFOW4FF432JA50	43.2 ohm
MCMFOW4FF442JA50	44.2 ohm
MCMFOW4FF453JA50	45.3 ohm
MCMFOW4FF464JA50	46.4 ohm
MCMFOW4FF470JA50	47 ohm
MCMFOW4FF475JA50	47.5 ohm
MCMFOW4FF487JA50	48.7 ohm
MCMFOW4FF499JA50	49.9 ohm
MCMFOW4FF510JA50	51 ohm
MCMFOW4FF511JA50	51.1 ohm
MCMFOW4FF523JA50	52.3 ohm
MCMFOW4FF536JA50	53.6 ohm
MCMFOW4FF549JA50	54.9 ohm
MCMFOW4FF560JA50	56 ohm
MCMFOW4FF562JA50	56.2 ohm
MCMFOW4FF576JA50	57.6 ohm
MCMFOW4FF590JA50	59 ohm
MCMFOW4FF604JA50	60.4 ohm
MCMFOW4FF619JA50	61.9 ohm
MCMFOW4FF620JA50	62 ohm
MCMFOW4FF634JA50	63.4 ohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF649JA50	64.9 ohm
MCMFOW4FF665JA50	66.5 ohm
MCMFOW4FF680JA50	68 ohm
MCMFOW4FF681JA50	68.1 ohm
MCMFOW4FF698JA50	69.8 ohm
MCMFOW4FF715JA50	71.5 ohm
MCMFOW4FF732JA50	73.2 ohm
MCMFOW4FF750JA50	75 ohm
MCMFOW4FF768JA50	76.8 ohm
MCMFOW4FF787JA50	78.7 ohm
MCMFOW4FF806JA50	80.6 ohm
MCMFOW4FF820JA50	82 ohm
MCMFOW4FF825JA50	82.5 ohm
MCMFOW4FF866JA50	86.6 ohm
MCMFOW4FF887JA50	88.7 ohm
MCMFOW4FF909JA50	90.9 ohm
MCMFOW4FF910JA50	91 ohm
MCMFOW4FF931JA50	93.1 ohm
MCMFOW4FF953JA50	95.3 ohm
MCMFOW4FF976JA50	97.6 ohm
MCMFOW4FF1000A50	100 ohm
MCMFOW4FF1020A50	102 ohm
MCMFOW4FF1050A50	105 ohm
MCMFOW4FF1070A50	107 ohm
MCMFOW4FF1100A50	110 ohm
MCMFOW4FF1130A50	113 ohm
MCMFOW4FF1150A50	115 ohm
MCMFOW4FF1180A50	118 ohm
MCMFOW4FF1200A50	120 ohm
MCMFOW4FF1210A50	121 ohm
MCMFOW4FF1240A50	124 ohm
MCMFOW4FF1270A50	127 ohm
MCMFOW4FF1300A50	130 ohm
MCMFOW4FF1330A50	133 ohm
MCMFOW4FF1370A50	137 ohm
MCMFOW4FF1400A50	140 ohm
MCMFOW4FF1430A50	143 ohm
MCMFOW4FF1470A50	147 ohm
MCMFOW4FF1500A50	150 ohm
MCMFOW4FF1540A50	154 ohm
MCMFOW4FF1580A50	158 ohm
MCMFOW4FF1600A50	160 ohm
MCMFOW4FF1620A50	162 ohm
MCMFOW4FF1650A50	165 ohm
MCMFOW4FF1690A50	169 ohm
MCMFOW4FF1740A50	174 ohm

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SPC-F004.DWG

SIZE DWG. NO.

A

TA-666

ELECTRONIC FILE

TA-666.DWG

REV

A

DOC. NO. SPC-F004 \* Effective: 7/8/02 \* DCP No: 1398

SCALE: NTS

U.O.M.: Millimeters

SHEET: 3 OF 6

Multicomp Mfr P/N #	Resistance
MCMFOW4FF1780A50	178 ohm
MCMFOW4FF1800A50	180 ohm
MCMFOW4FF1820A50	182 ohm
MCMFOW4FF1870A50	187 ohm
MCMFOW4FF1910A50	191 ohm
MCMFOW4FF1960A50	196 ohm
MCMFOW4FF2000A50	200 ohm
MCMFOW4FF2050A50	205 ohm
MCMFOW4FF2100A50	210 ohm
MCMFOW4FF2150A50	215 ohm
MCMFOW4FF2200A50	220 ohm
MCMFOW4FF2210A50	221 ohm
MCMFOW4FF2260A50	226 ohm
MCMFOW4FF2320A50	232 ohm
MCMFOW4FF2370A50	237 ohm
MCMFOW4FF2400A50	240 ohm
MCMFOW4FF2490A50	249 ohm
MCMFOW4FF2550A50	255 ohm
MCMFOW4FF2610A50	261 ohm
MCMFOW4FF2670A50	267 ohm
MCMFOW4FF2700A50	270 ohm
MCMFOW4FF2740A50	274 ohm
MCMFOW4FF2800A50	280 ohm
MCMFOW4FF2870A50	287 ohm
MCMFOW4FF2940A50	294 ohm
MCMFOW4FF3000A50	300 ohm
MCMFOW4FF3010A50	301 ohm
MCMFOW4FF3090A50	309 ohm
MCMFOW4FF3160A50	316 ohm
MCMFOW4FF3240A50	324 ohm
MCMFOW4FF3300A50	330 ohm
MCMFOW4FF3320A50	332 ohm
MCMFOW4FF3400A50	340 ohm
MCMFOW4FF3480A50	348 ohm
MCMFOW4FF3570A50	357 ohm
MCMFOW4FF3600A50	360 ohm
MCMFOW4FF3650A50	365 ohm
MCMFOW4FF3740A50	374 ohm
MCMFOW4FF3830A50	383 ohm
MCMFOW4FF3900A50	390 ohm
MCMFOW4FF3920A50	392 ohm
MCMFOW4FF4020A50	402 ohm
MCMFOW4FF4120A50	412 ohm
MCMFOW4FF4220A50	422 ohm
MCMFOW4FF4300A50	430 ohm
MCMFOW4FF4303A50	430 ohm
MCMFOW4FF4320A50	432 ohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF4420A50	442 ohm
MCMFOW4FF4530A50	453 ohm
MCMFOW4FF4640A50	464 ohm
MCMFOW4FF4700A50	470 ohm
MCMFOW4FF4750A50	475 ohm
MCMFOW4FF4870A50	487 ohm
MCMFOW4FF4990A50	499 ohm
MCMFOW4FF5100A50	510 ohm
MCMFOW4FF5110A50	511 ohm
MCMFOW4FF5230A50	523 ohm
MCMFOW4FF5360A50	536 ohm
MCMFOW4FF5490A50	549 ohm
MCMFOW4FF5600A50	560 ohm
MCMFOW4FF5620A50	562 ohm
MCMFOW4FF5760A50	576 ohm
MCMFOW4FF5900A50	590 ohm
MCMFOW4FF6040A50	604 ohm
MCMFOW4FF6190A50	619 ohm
MCMFOW4FF6200A50	620 ohm
MCMFOW4FF6340A50	634 ohm
MCMFOW4FF6490A50	649 ohm
MCMFOW4FF6650A50	665 ohm
MCMFOW4FF6800A50	680 ohm
MCMFOW4FF6810A50	681 ohm
MCMFOW4FF6980A50	698 ohm
MCMFOW4FF7150A50	715 ohm
MCMFOW4FF7320A50	732 ohm
MCMFOW4FF7500A50	750 ohm
MCMFOW4FF7680A50	768 ohm
MCMFOW4FF7870A50	787 ohm
MCMFOW4FF8060A50	806 ohm
MCMFOW4FF8200A50	820 ohm
MCMFOW4FF8250A50	825 ohm
MCMFOW4FF8450A50	845 ohm
MCMFOW4FF8660A50	866 ohm
MCMFOW4FF8870A50	887 ohm
MCMFOW4FF9090A50	909 ohm
MCMFOW4FF9100A50	910 ohm
MCMFOW4FF9310A50	931 ohm
MCMFOW4FF9530A50	953 ohm
MCMFOW4FF9760A50	976 ohm
MCMFOW4FF1001A50	1 Kohm
MCMFOW4FF1021A50	1.02 Kohm
MCMFOW4FF1051A50	1.05 Kohm
MCMFOW4FF1071A50	1.07 Kohm
MCMFOW4FF1101A50	1.1 Kohm
MCMFOW4FF1131A50	1.13 Kohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF1151A50	1.15 Kohm
MCMFOW4FF1181A50	1.18 Kohm
MCMFOW4FF1201A50	1.2 Kohm
MCMFOW4FF1211A50	1.21 Kohm
MCMFOW4FF1241A50	1.24 Kohm
MCMFOW4FF1271A50	1.27 Kohm
MCMFOW4FF1301A50	1.3 Kohm
MCMFOW4FF1331A50	1.33 Kohm
MCMFOW4FF1371A50	1.37 Kohm
MCMFOW4FF1401A50	1.40 Kohm
MCMFOW4FF1431A50	1.43 Kohm
MCMFOW4FF1471A50	1.47 Kohm
MCMFOW4FF1501A50	1.5 Kohm
MCMFOW4FF1541A50	1.54 Kohm
MCMFOW4FF1581A50	1.58 Kohm
MCMFOW4FF1601A50	1.6 Kohm
MCMFOW4FF1621A50	1.62 Kohm
MCMFOW4FF1651A50	1.65 Kohm
MCMFOW4FF1691A50	1.69 Kohm
MCMFOW4FF1741A50	1.74 Kohm
MCMFOW4FF1781A50	1.78 Kohm
MCMFOW4FF1801A50	1.8 Kohm
MCMFOW4FF1821A50	1.82 Kohm
MCMFOW4FF1871A50	1.87 Kohm
MCMFOW4FF1911A50	1.91 Kohm
MCMFOW4FF1961A50	1.96 Kohm
MCMFOW4FF2001A50	2 Kohm
MCMFOW4FF2051A50	2.05 Kohm
MCMFOW4FF2101A50	2.10 Kohm
MCMFOW4FF2151A50	2.15 Kohm
MCMFOW4FF2201A50	2.2 Kohm
MCMFOW4FF2211A50	2.21 Kohm
MCMFOW4FF2261A50	2.26 Kohm
MCMFOW4FF2321A50	2.32 Kohm
MCMFOW4FF2371A50	2.37 Kohm
MCMFOW4FF2401A50	2.4 Kohm
MCMFOW4FF2431A50	2.43 Kohm
MCMFOW4FF2491A50	2.49 Kohm
MCMFOW4FF2551A50	2.55 Kohm
MCMFOW4FF2611A50	2.61 Kohm
MCMFOW4FF2671A50	2.67 Kohm
MCMFOW4FF2701A50	2.7 Kohm
MCMFOW4FF2741A50	2.74 Kohm
MCMFOW4FF2801A50	2.80 Kohm
MCMFOW4FF2871A50	2.87 Kohm
MCMFOW4FF2941A50	2.94 Kohm
MCMFOW4FF3001A50	3 Kohm

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SPC-F004.DWG

SIZE DWG. NO.

A

TA-666

ELECTRONIC FILE

TA-666.DWG

REV

A

SCALE: NTS

U.O.M.: Millimeters

SHEET: 4 OF 6

Multicomp Mfr P/N #	Resistance
MCMFOW4FF301A50	3.01 Kohm
MCMFOW4FF309A50	3.09 Kohm
MCMFOW4FF316A50	3.16 Kohm
MCMFOW4FF324A50	3.24 Kohm
MCMFOW4FF330A50	3.3 Kohm
MCMFOW4FF332A50	3.32 Kohm
MCMFOW4FF3321T50	3.32 Kohm
MCMFOW4FF340A50	3.40 Kohm
MCMFOW4FF348A50	3.48 Kohm
MCMFOW4FF357A50	3.57 Kohm
MCMFOW4FF360A50	3.6 Kohm
MCMFOW4FF365A50	3.65 Kohm
MCMFOW4FF374A50	3.74 Kohm
MCMFOW4FF383A50	3.83 Kohm
MCMFOW4FF390A50	3.9 Kohm
MCMFOW4FF392A50	3.92 Kohm
MCMFOW4FF402A50	4.02 Kohm
MCMFOW4FF412A50	4.12 Kohm
MCMFOW4FF422A50	4.22 Kohm
MCMFOW4FF430A50	4.3 Kohm
MCMFOW4FF432A50	4.32 Kohm
MCMFOW4FF442A50	4.42 Kohm
MCMFOW4FF453A50	4.53 Kohm
MCMFOW4FF464A50	4.64 Kohm
MCMFOW4FF470A50	4.7 Kohm
MCMFOW4FF475A50	4.75 Kohm
MCMFOW4FF487A50	4.87 Kohm
MCMFOW4FF499A50	4.99 Kohm
MCMFOW4FF510A50	5.1 Kohm
MCMFOW4FF511A50	5.11 Kohm
MCMFOW4FF523A50	5.23 Kohm
MCMFOW4FF536A50	5.36 Kohm
MCMFOW4FF549A50	5.49 Kohm
MCMFOW4FF560A50	5.6 Kohm
MCMFOW4FF562A50	5.62 Kohm
MCMFOW4FF576A50	5.76 Kohm
MCMFOW4FF590A50	5.90 Kohm
MCMFOW4FF604A50	6.04 Kohm
MCMFOW4FF619A50	6.19 Kohm
MCMFOW4FF620A50	6.2 Kohm
MCMFOW4FF634A50	6.34 Kohm
MCMFOW4FF649A50	6.49 Kohm
MCMFOW4FF665A50	6.65 Kohm
MCMFOW4FF680A50	6.8 Kohm
MCMFOW4FF681A50	6.81 Kohm
MCMFOW4FF698A50	6.98 Kohm
MCMFOW4FF715A50	7.15 Kohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF732A50	7.32 Kohm
MCMFOW4FF750A50	7.5 Kohm
MCMFOW4FF768A50	7.68 Kohm
MCMFOW4FF787A50	7.87 Kohm
MCMFOW4FF806A50	8.06 Kohm
MCMFOW4FF820A50	8.2 Kohm
MCMFOW4FF825A50	8.25 Kohm
MCMFOW4FF8251T50	8.25 Kohm
MCMFOW4FF845A50	8.45 Kohm
MCMFOW4FF866A50	8.66 Kohm
MCMFOW4FF887A50	8.87 Kohm
MCMFOW4FF909A50	9.09 Kohm
MCMFOW4FF910A50	9.1 Kohm
MCMFOW4FF931A50	9.31 Kohm
MCMFOW4FF953A50	9.53 Kohm
MCMFOW4FF976A50	9.76 Kohm
MCMFOW4FF1002A50	10 Kohm
MCMFOW4FF1022A50	10.2 Kohm
MCMFOW4FF1052A50	10.5 Kohm
MCMFOW4FF1072A50	10.7 Kohm
MCMFOW4FF1102A50	11 Kohm
MCMFOW4FF1132A50	11.3 Kohm
MCMFOW4FF1152A50	11.5 Kohm
MCMFOW4FF1182A50	11.8 Kohm
MCMFOW4FF1202A50	12 Kohm
MCMFOW4FF1212A50	12.1 Kohm
MCMFOW4FF1242A50	12.4 Kohm
MCMFOW4FF1272A50	12.7 Kohm
MCMFOW4FF1302A50	13 Kohm
MCMFOW4FF1332A50	13.3 Kohm
MCMFOW4FF1372A50	13.7 Kohm
MCMFOW4FF1402A50	14 Kohm
MCMFOW4FF1432A50	14.3 Kohm
MCMFOW4FF1472A50	14.7 Kohm
MCMFOW4FF1502A50	15 Kohm
MCMFOW4FF1542A50	15.4 Kohm
MCMFOW4FF1582A50	15.8 Kohm
MCMFOW4FF1602A50	16 Kohm
MCMFOW4FF1622A50	16.2 Kohm
MCMFOW4FF1652A50	16.5 Kohm
MCMFOW4FF1692A50	16.9 Kohm
MCMFOW4FF1742A50	17.4 Kohm
MCMFOW4FF1782A50	17.8 Kohm
MCMFOW4FF1802A50	18 Kohm
MCMFOW4FF1822A50	18.2 Kohm
MCMFOW4FF1872A50	18.7 Kohm
MCMFOW4FF1912A50	19.1 Kohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF1962A50	19.6 Kohm
MCMFOW4FF2002A50	20 Kohm
MCMFOW4FF2052A50	20.5 Kohm
MCMFOW4FF2102A50	21 Kohm
MCMFOW4FF2152A50	21.5 Kohm
MCMFOW4FF2202A50	22 Kohm
MCMFOW4FF2212A50	22.1 Kohm
MCMFOW4FF2262A50	22.6 Kohm
MCMFOW4FF2322A50	23.2 Kohm
MCMFOW4FF2372A50	23.7 Kohm
MCMFOW4FF2402A50	24 Kohm
MCMFOW4FF2432A50	24.3 Kohm
MCMFOW4FF2492A50	24.9 Kohm
MCMFOW4FF2552A50	25.5 Kohm
MCMFOW4FF2612A50	26.1 Kohm
MCMFOW4FF2672A50	26.7 Kohm
MCMFOW4FF2702A50	27 Kohm
MCMFOW4FF2742A50	27.4 Kohm
MCMFOW4FF2802A50	28 Kohm
MCMFOW4FF2872A50	28.7 Kohm
MCMFOW4FF2942A50	29.4 Kohm
MCMFOW4FF3002A50	30 Kohm
MCMFOW4FF3012A50	30.1 Kohm
MCMFOW4FF3092A50	30.9 Kohm
MCMFOW4FF3162A50	31.6 Kohm
MCMFOW4FF3242A50	32.4 Kohm
MCMFOW4FF3302A50	33 Kohm
MCMFOW4FF3322A50	33.2 Kohm
MCMFOW4FF3402A50	34 Kohm
MCMFOW4FF3482A50	34.8 Kohm
MCMFOW4FF3602A50	36 Kohm
MCMFOW4FF3652A50	36.5 Kohm
MCMFOW4FF3742A50	37.4 Kohm
MCMFOW4FF3832A50	38.3 Kohm
MCMFOW4FF3902A50	39 Kohm
MCMFOW4FF3922A50	39.2 Kohm
MCMFOW4FF4022A50	40.2 Kohm
MCMFOW4FF4122A50	41.2 Kohm
MCMFOW4FF4222A50	42.2 Kohm
MCMFOW4FF4302A50	43 Kohm
MCMFOW4FF4322A50	43.2 Kohm
MCMFOW4FF4422A50	44.2 Kohm
MCMFOW4FF4532A50	45.3 Kohm
MCMFOW4FF4642A50	46.4 Kohm
MCMFOW4FF4702A50	47 Kohm
MCMFOW4FF4752A50	47.5 Kohm
MCMFOW4FF4872A50	48.7 Kohm

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SPC-F004.DWG

SIZE DWG. NO.

A

TA-666

ELECTRONIC FILE

TA-666.DWG

REV

A

SCALE: NTS

U.O.M.: Millimeters

SHEET: 5 OF 6

Multicomp Mfr P/N #	Resistance
MCMFOW4FF4992A50	49.9 Kohm
MCMFOW4FF5102A50	51 Kohm
MCMFOW4FF5112A50	51.1 Kohm
MCMFOW4FF5232A50	52.3 Kohm
MCMFOW4FF5362A50	53.6 Kohm
MCMFOW4FF5492A50	54.9 Kohm
MCMFOW4FF5602A50	56 Kohm
MCMFOW4FF5622A50	56.2 Kohm
MCMFOW4FF5762A50	57.6 Kohm
MCMFOW4FF5902A50	59 Kohm
MCMFOW4FF6042A50	60.4 Kohm
MCMFOW4FF6192A50	61.9 Kohm
MCMFOW4FF6202A50	62 Kohm
MCMFOW4FF6342A50	63.4 Kohm
MCMFOW4FF6492A50	64.9 Kohm
MCMFOW4FF6652A50	66.5 Kohm
MCMFOW4FF6802A50	68 Kohm
MCMFOW4FF6812A50	68.1 Kohm
MCMFOW4FF6982A50	69.8 Kohm
MCMFOW4FF7152A50	71.5 Kohm
MCMFOW4FF7322A50	73.2 Kohm
MCMFOW4FF7502A50	75 Kohm
MCMFOW4FF7682A50	76.8 Kohm
MCMFOW4FF8062A50	80.6 Kohm
MCMFOW4FF8202A50	82 Kohm
MCMFOW4FF8252A50	82.5 Kohm
MCMFOW4FF8452A50	84.5 Kohm
MCMFOW4FF8662A50	86.6 Kohm
MCMFOW4FF8872A50	88.7 Kohm
MCMFOW4FF9092A50	90.9 Kohm
MCMFOW4FF9102A50	91 Kohm
MCMFOW4FF9312A50	93.1 Kohm
MCMFOW4FF9532A50	95.3 Kohm
MCMFOW4FF9762A50	97.6 Kohm
MCMFOW4FF1003A50	100 Kohm
MCMFOW4FF1023A50	102 Kohm
MCMFOW4FF1053A50	105 Kohm
MCMFOW4FF1073A50	107 Kohm
MCMFOW4FF1103A50	110 Kohm
MCMFOW4FF1133A50	113 Kohm
MCMFOW4FF1153A50	115 Kohm
MCMFOW4FF1183A50	118 Kohm
MCMFOW4FF1203A50	120 Kohm
MCMFOW4FF1213A50	121 Kohm
MCMFOW4FF1243A50	124 Kohm
MCMFOW4FF1273A50	127 Kohm
MCMFOW4FF1303A50	130 Kohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF1333A50	133 Kohm
MCMFOW4FF1373A50	137 Kohm
MCMFOW4FF1433A50	143 Kohm
MCMFOW4FF1473A50	147 Kohm
MCMFOW4FF1503A50	150 Kohm
MCMFOW4FF1543A50	154 Kohm
MCMFOW4FF1583A50	158 Kohm
MCMFOW4FF1603A50	160 Kohm
MCMFOW4FF1623A50	162 Kohm
MCMFOW4FF1653A50	165 Kohm
MCMFOW4FF1693A50	169 Kohm
MCMFOW4FF1743A50	174 Kohm
MCMFOW4FF1783A50	178 Kohm
MCMFOW4FF1803A50	180 Kohm
MCMFOW4FF1823A50	182 Kohm
MCMFOW4FF1873A50	187 Kohm
MCMFOW4FF1913A50	191 Kohm
MCMFOW4FF1963A50	196 Kohm
MCMFOW4FF2003A50	200 Kohm
MCMFOW4FF2053A50	205 Kohm
MCMFOW4FF2103A50	210 Kohm
MCMFOW4FF2153A50	215 Kohm
MCMFOW4FF2203A50	220 Kohm
MCMFOW4FF2213A50	221 Kohm
MCMFOW4FF2263A50	226 Kohm
MCMFOW4FF2323A50	232 Kohm
MCMFOW4FF2373A50	237 Kohm
MCMFOW4FF2403A50	240 Kohm
MCMFOW4FF2433A50	243 Kohm
MCMFOW4FF2493A50	249 Kohm
MCMFOW4FF2553A50	255 Kohm
MCMFOW4FF2613A50	261 Kohm
MCMFOW4FF2673A50	267 Kohm
MCMFOW4FF2703A50	270 Kohm
MCMFOW4FF2743A50	274 Kohm
MCMFOW4FF2803A50	280 Kohm
MCMFOW4FF2873A50	287 Kohm
MCMFOW4FF2943A50	294 Kohm
MCMFOW4FF3003A50	300 Kohm
MCMFOW4FF3013A50	301 Kohm
MCMFOW4FF3093A50	309 Kohm
MCMFOW4FF3163A50	316 Kohm
MCMFOW4FF3243A50	324 Kohm
MCMFOW4FF3303A50	330 Kohm
MCMFOW4FF3323A50	332 Kohm
MCMFOW4FF3403A50	340 Kohm
MCMFOW4FF3483A50	348 Kohm

Multicomp Mfr P/N #	Resistance
MCMFOW4FF3573A50	357 Kohm
MCMFOW4FF3603A50	360 Kohm
MCMFOW4FF3653A50	365 Kohm
MCMFOW4FF3743A50	374 Kohm
MCMFOW4FF3833A50	383 Kohm
MCMFOW4FF3903A50	390 Kohm
MCMFOW4FF3923A50	392 Kohm
MCMFOW4FF4023A50	402 Kohm
MCMFOW4FF4123A50	412 Kohm
MCMFOW4FF4223A50	422 Kohm
MCMFOW4FF4323A50	432 Kohm
MCMFOW4FF4423A50	442 Kohm
MCMFOW4FF4533A50	453 Kohm
MCMFOW4FF4643A50	464 Kohm
MCMFOW4FF4703A50	470 Kohm
MCMFOW4FF4753A50	475 Kohm
MCMFOW4FF4873A50	487 Kohm
MCMFOW4FF4993A50	499 Kohm
MCMFOW4FF5103A50	510 Kohm
MCMFOW4FF5113A50	511 Kohm
MCMFOW4FF5233A50	523 Kohm
MCMFOW4FF5363A50	536 Kohm
MCMFOW4FF5493A50	549 Kohm
MCMFOW4FF5603A50	560 Kohm
MCMFOW4FF5623A50	562 Kohm
MCMFOW4FF5763A50	576 Kohm

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SIZE DWG. NO.

A

TA-666

ELECTRONIC FILE

TA-666.DWG

REV

A

SCALE: NTS

U.O.M.: Millimeters

SHEET: 6 OF 6