



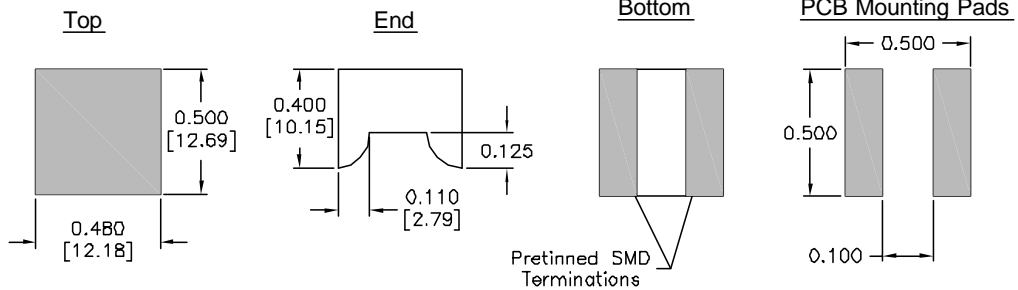
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SPC-F005.DWG

REVISIONS

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1996	A	Released	JN	11/07/08	JWM	11/07/08	JWM	11/07/08

DOC. NO. SPC-F005 \* Effective: 7/8/02 \* DCP No: 1308



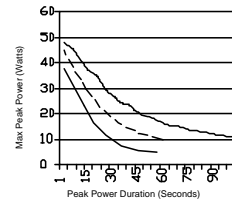
Features

- Up to 12W with no external heat sinks Up to 50W for short duration
- Compatible with conventional pick and place Patent pending
- Non inductive resistive element RoHS compliant / lead-free
- Anodized heat sink top provides 800V voltage withstanding

Electrical Specifications						
Power Rating (Watts) @ 40°C w/400 LFM air flow	Power Rating (Watts) @ 40°C no air flow	Maximum Working Voltage	Max Overload Voltage	Dielectric Strength	Inductance	Resistance Temperature Coefficient
12W	5W	200V	400V	1,500V	<2nH	±150 ppm/°C

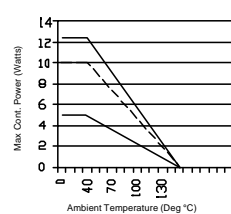
Performance Characteristics		
Test	Test Conditions (JIS C 5202)	Test Results
Short Time Overload	2.5x rated voltage for 5 seconds	±2% +0.1 Ω
Dielectric Withstanding Voltage	100VAC, 1 minute	±1% +0.05 Ω
Resistance to Soldering Heat	260°C ±5°C, for 10 sec. ±0.5 sec. (Solder Bath)	±1% +0.05 Ω
Solderability	235°C ±5°C, for 2 sec. ±0.5 sec. (Colophonium flux)	95% coverage, minimum
Temperature Cycle	-65°C: 30 min. 25°C: 2 to 3 min. 150°C: 30 min. 25°C: 2 to 3 min. (5 Cycles)	±1% +0.05 Ω Jumper (<0.05 Ω)
Endurance (Damp load)	40°C ± 2°C, 90% to RH, Rated Load 90 min. On, 30 min. Off for 1,000 hrs. -0 hrs. / +48 hrs.	±3% +0.1 Ω Jumper (<0.05 Ω)
Endurance (Rated load)	70°C ± 2°C, 90% to RH, Rated Load 90 min. On, 30 min. Off for 1,000 hrs. -0 hrs. / +48 hrs.	±3% +0.1 Ω Jumper (<0.05 Ω)
Voltage Coefficient	1/10 rated voltage for 3 sec. max, then rated voltage for 3 sec. max.	±100 (ppm/V)
Robustness of Termination	Bend of 3mm for 5 ± 1 sec.	±(1.0% + 0.05 Ohm)

MCHPC 12 Power vs. Duration



— 10% Duty Cycle, 200 LFM  
 - - 10% Duty Cycle, No Airflow  
 - - 30% Duty Cycle, 200 LFM  
 — 33% Duty Cycle, No Airflow

MCHPC 12 Power Derating Curve



— 400 LFM Airflow  
 - - 200 LFM Airflow  
 — No Airflow

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TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Jason Nash	11/07/08
CHECKED BY:	DATE:
Jeff McVicker	11/07/08
APPROVED BY:	DATE:
Jeff McVicker	11/07/08

DRAWING TITLE: High Power Surface Mounting Resistor			
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	Ta-1075	Ta-1075.dwg	A
SCALE:	NTS	U.Q.M.: INCHES [mm]	SHEET: 1 OF 1



Mfg. P/N	Resistance	Unit of Measure	Quantity
MCHPC12W1R00JR	1ohm	Tape & Cut	1 Ea.
MCHPC12W1R00JR	1ohm	Tape & Reel	Spool of 200
MCHPC12W10R0JR	10ohm	Tape & Cut	1 Ea.
MCHPC12W10R0JR	10ohm	Tape & Reel	Spool of 200
MCHPC12W100RJR	100ohm	Tape & Cut	1 Ea.
MCHPC12W100RJR	100ohm	Tape & Reel	Spool of 200
MCHPC12W1001JR	1kohm	Tape & Cut	1 Ea.
MCHPC12W1001JR	1kohm	Tape & Reel	Spool of 200
MCHPC12W1002JR	10kohm	Tape & Cut	1 Ea.
MCHPC12W1002JR	10kohm	Tape & Reel	Spool of 200
MCHPC12W15R0JR	15ohm	Tape & Cut	1 Ea.
MCHPC12W15R0JR	15ohm	Tape & Reel	Spool of 200
MCHPC12W150RJR	150ohm	Tape & Cut	1 Ea.
MCHPC12W150RJR	150ohm	Tape & Reel	Spool of 200
MCHPC12W22R0JR	22ohm	Tape & Cut	1 Ea.
MCHPC12W22R0JR	22ohm	Tape & Reel	Spool of 200
MCHPC12W220RJR	220ohm	Tape & Cut	1 Ea.
MCHPC12W220RJR	220ohm	Tape & Reel	Spool of 200
MCHPC12W24R0JR	24ohm	Tape & Cut	1 Ea.
MCHPC12W24R0JR	24ohm	Tape & Reel	Spool of 200
MCHPC12W2701JR	2.7kohm	Tape & Cut	1 Ea.
MCHPC12W2701JR	2.7kohm	Tape & Reel	Spool of 200
MCHPC12W3R90JR	3.9ohm	Tape & Cut	1 Ea.
MCHPC12W3R90JR	3.9ohm	Tape & Reel	Spool of 200
MCHPC12W33R0JR	33ohm	Tape & Cut	1 Ea.
MCHPC12W33R0JR	33ohm	Tape & Reel	Spool of 200
MCHPC12W47R0JR	47ohm	Tape & Cut	1 Ea.
MCHPC12W47R0JR	47ohm	Tape & Reel	Spool of 200
MCHPC12W470RJR	470ohm	Tape & Cut	1 Ea.
MCHPC12W470RJR	470ohm	Tape & Reel	Spool of 200
MCHPC12W5001JR	5kohm	Tape & Cut	1 Ea.
MCHPC12W5001JR	5kohm	Tape & Reel	Spool of 200
MCHPC12W51R0JR	51ohm	Tape & Cut	1 Ea.
MCHPC12W51R0JR	51ohm	Tape & Reel	Spool of 200

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SPC-FR05.DWG      DOC. NO. SPC-FR05 \* Effective 7/9/02 \* DCP No. 1385

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	Ta-1075	Ta-1075.DWG	A
SCALE: NTS	U.O.M.: INCHES [mm]	SHEET: 2	OF 2