

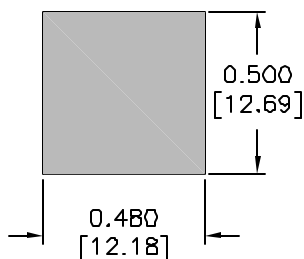
REVISIONS

DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398

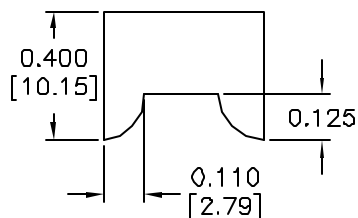
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1996	A	Released	JN	11/07/08	JWM	11/07/08	JWM	11/07/08



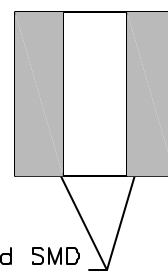
Top



End

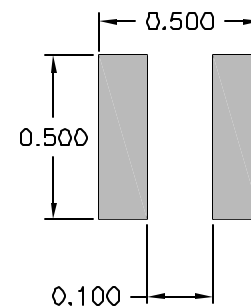


Bottom



Pretinned SMD Terminations

PCB Mounting Pads



Features

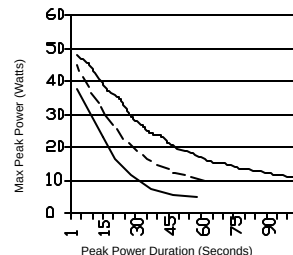
- Up to 12W with no external heat sinks Up to 50W for short duration
- Compatible with conventional pick and place Patent pending
- Non inductive resistive element RoHS compliant / lead-free
- Anodized heat sink top provides 800V voltage withstanding

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

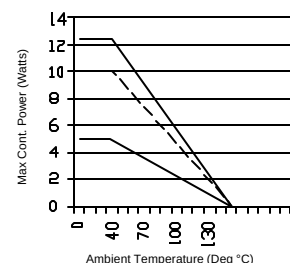
Performance Characteristics		
Test	Test Conditions (JIS C 5202)	Test Results
Short Time Overload	2.5x rated voltage for 5 seconds	±2 % +0.1 Ω
Dielectric Withstanding Voltage	100VAC, 1 minute	±1 % +0.05 Ω
Resistance to Soldering Heat	260°C ±5°C, for 10 sec. ±0.5 sec. (Solder Bath)	±1 % +0.05 Ω
Solderability	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
 — 33% Duty Cycle, No Airflow

MCHPC 12 Power Derating Curve



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

DISCLAIMER:
 ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:

Jason Nash

CHECKED BY:

Jeff McVicker

APPROVED BY:

Jeff McVicker

DATE:

11/07/08

DATE:

11/07/08

DATE:

11/07/08

DRAWING TITLE:

High Power Surface Mounting Resistor

SIZE

A

DWG. NO.

Ta-1075

ELECTRONIC FILE

Ta-1075.dwg

REV

A

SCALE: NTS

U.O.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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