

The content of this specification may change without notification 7/24/07

OLR Series - Custom Made Metal Plate Current Sense Resistor

Custom solutions are available.



HOW TO ORDER

OLRA -5W- 1M0 J B

Packaging
B = Bulk or M = Tape

Tolerance (%)
F = ± 1 J = ± 5 K = ± 10

EIA Resistance Value
0M5 = 0.0005Ω
1M0 = 0.005Ω
10M = 0.01Ω

Rated Power
Avail in 1W ~20W

Series
Custom Open Air Sense Resistors
A = Body Style 1
B = Body Style 2
C = Body Style 3
D = Body Style 4

FEATURES

- Very Low Resistance $0.5m\Omega \sim 50m\Omega$
- High Rated Power from 1W to 20W
- Custom Solutions avail in 2 or 4 Terminals
- Open air design provides cooler operation
- Applicable for Reflow Soldering
- Superior thermal expansion cycling
- Low Inductance at less than 10nH
- Lead flexible for thermal expansion
- Products with lead-free terminations meet RoHS requirements

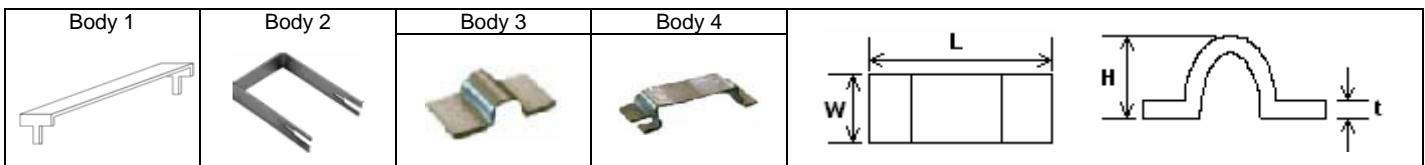
APPLICATIONS

- Automotive
- Feedback
- Low Inductance
- Surge and Pulse
- Residual Battery Detection
- Inverter Power Supply
- Switching Power Source
- HDD, MOSFET Load
- CPU Drive use
- AC Applications
- Power Tool

RATING

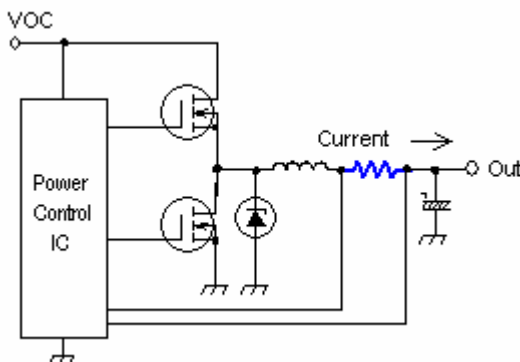
Terminations	2 and 4 are available
Rated Power (70°C)	1W ~ 20W
Resistance Range	$0.5m\Omega \sim 50m\Omega$
Resistance Tolerance	$\pm 1\%$, $\pm 5\%$, $\pm 10\%$
TCR	$\pm 100ppm/^\circ C$
Operating Temperature	$-40^\circ C \sim +180^\circ C$

SHAPE & DIMENSIONS (custom to your requirements)



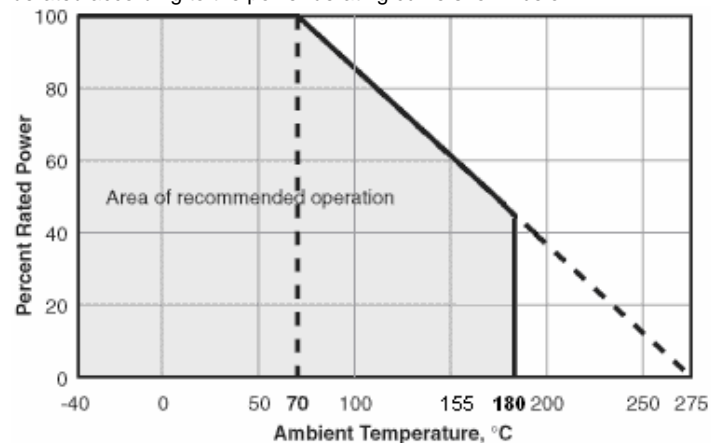
CIRCUIT LAYOUT example for Automotive

- DC-DC Converter over current detection
- Engine Starter
- Air Conditioning Fan
- Battery
- Power Windows
- Automatic Mirrors
- Motor Control Circuit



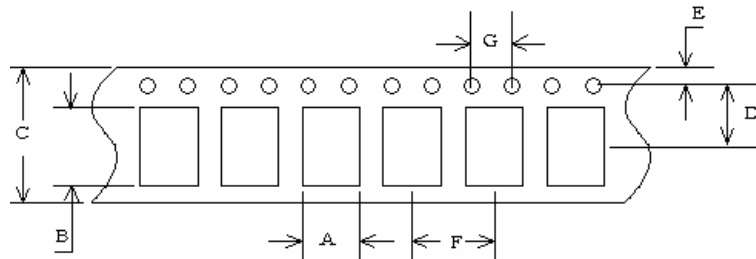
DERATING CURVE

If the ambient temperature exceeds 70°C, the rated power has to be derated according to the power derating curve shown below.



PERFORMANCE CHARACTERISTICS

Item	Parameter
TCR (+125°C ~ -55°C)	± 10ppm
Thermal Shock	± 1%
High Temperature Exposure	± 3%
Temperature Cycling (-40°C ~ +125°C)	± 1%
Operating Life	± 3%
Solderability	95% minimum coverage
Moisture Resistance	± 3%
Base Humidity	± 3%
Vibration	± 1%
Terminal Strength	± 1%
Solvent Resistance	± 1%



TAPE PACKAGING (mm)

Tape	A	B	C	D	E	F	G
	6.4±0.1	7.4±0.1	16.0±0.3	7.5±0.1	1.75±0.1	8.0±0.1	4.0±0.1