NPS 2-T126

Power SMD Resistors



- **Resistances from 0.025Ohm to 10kOhms**
- **Power Rating to 25Watt**
- **Resistance Tolerances to ±1%**
- **TCR to ±100ppm/°C**
- **Load Stability to 0.5%**
- **TO-126 Housing (D-Pak)**
- **Solder Reflow Secure at 260°C / 20s**

SPECIFICATIONS

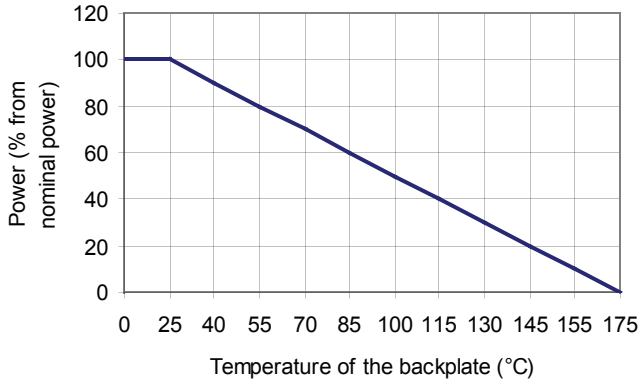
Type	NPS 2-T126			
Terminals	2			
Resistance Range	0.025 to 0.049Ohms	0.05 to 0.099Ohms	0.1 to 0.99Ohms	1Ohms to 10kOhms
Power Rating Heatsink Power Rating Simple Pad	25 W 0.6 W			
Thermal Resistance Rthj-c	6.0 C / W			
Tolerances (others upon request)	2% / 5%		1% / 2% / 5%	
Stability	0.5%			
Temperature Coefficient (TCR 50ppm upon request)	±500 ppm/°C	±400 ppm/°C	±300 ppm/°C	±100 ppm/°C
Voltage Proof	2.0 kV DC			
Operating Temperature	-40°C to 175°C			
Resistor Material	Thick Film			
Substrate	Al_2O_3			
Housing	Epoxy			
Connector Material	Cu / Ni-flash / lead-free tinned			
Reflow soldering	lead-free soldering 260°C / 20s			

Ordering Information

Part Description: Part Type - Resistance - Tolerance
NPS 2-T126 1.1 Ohms 1%

SPECIFICATIONS (continued)

Derating

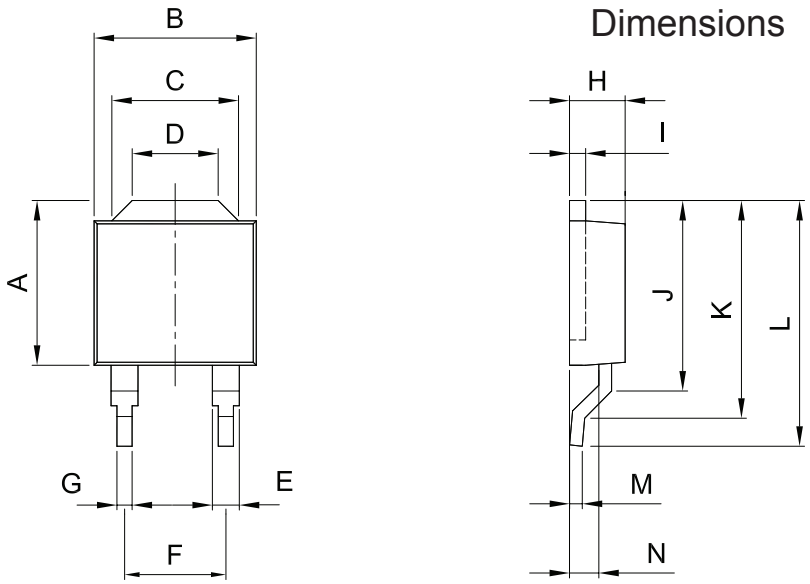


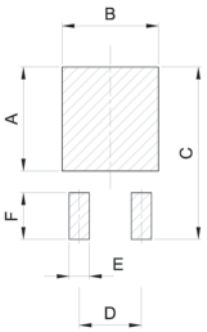
Power Rating Notes -
The NPS Series Resistors must be attached to a suitable heat-sink. The maximum internal resistor temperature is 175°C.
To specify an appropriate heatsink use the following formula :

$$R_{\theta H} = \frac{T_{MAX} - (P \times R_{\theta R}) - T_A}{P}$$

Where: $R_{\theta H}$ = Thermal Resistance of Heatsink (K/W)
$R_{\theta R}$ = Thermal Resistance of Resistor (K/W)
T_{MAX} = Maximum Temperature of Resistor
T_A = Ambient Temperature of Heatsink (°C)
P = Power Through Resistor (W)

Dimensions





Dimension	mm	tol. (±mm)	inches	tol. (±inches)
A	8.26	0.2	0.33	0.008
B	8.13	0.2	0.32	0.008
C	6.35	0.1	0.25	0.004
D	4.31	0.1	0.17	0.004
E	1.35	0.1	0.05	0.004
F	5.08	0.1	0.20	0.004
G	0.76	0.1	0.03	0.004
H	2.79	0.1	0.11	0.004
I	0.8	0.1	0.03	0.004
J	9.55	0.2	0.38	0.008
K	10.92	0.2	0.43	0.008
L	12.32	0.2	0.49	0.008
M	0.6	0.1	0.02	0.004
N	1.47	0.1	0.06	0.004

Dimension	mm	inches
A	8.51	0.335
B	7.87	0.310
C	14.1	0.555
D	5.08	0.200
E	1.65	0.065
F	3.81	0.150