



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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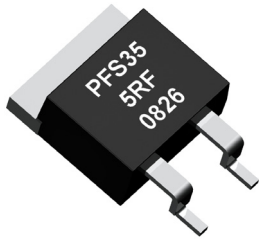
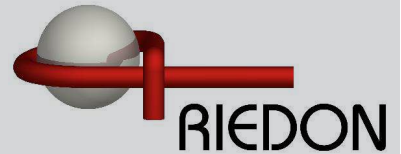
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



PFS35

Power SMD Film Resistors

In Stock at
DIGI-KEY



- TO-263 Housing (D-Pak)
- Resistances from 0.01Ohm to 51kOhms
- Power Rating to 35Watt
- Resistance Tolerances to $\pm 1\%$
- TCR to $\pm 50\text{ppm/K}$
- Load Stability to 1%
- Solder Reflow Secure at $260^\circ\text{C} / 20\text{s}$
- Isolated Back Plate

SPECIFICATIONS

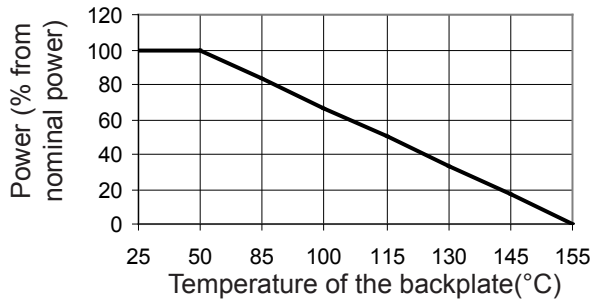
Type	PFS35		
Terminals	2		
Power Rating (with heatsink)	35 W (2W on Simple Solder Pad)		
Thermal Resistance Rthj-c	3.3 K/W		
Resistance Range	0.01 to 0.099Ohms	0.1 to 9.9Ohms	10 to 51KOhms
Tolerances (others upon request)	5%	1% / 5%	1%
Temperature Coefficient	$\pm 250\text{ ppm/K}$	$\pm 100\text{ ppm/K}$	$\pm 50\text{ ppm/K}$
Operating Temperature	-55°C to 155°C		
Max Operating Voltage	500V		
Voltage Proof	2.0kV DC		
Insulation Resistance	Over 1,000 Megohm		
Resistor Material	Thin Film		
Load Life	$\pm 1\%$	90 min ON, 30 min OFF, 1000 hrs @ 25C	
Humidity	$\pm 1\%$	90-95% RH, 0.1W, 1000 hrs @ 40C	
Temperature Cycle	$\pm 0.25\%$	-55C for 30 min, $+155\text{C}$ for 30 min, 5 cycles	
Solder Heat	$\pm 0.1\%$	350C $\pm 5\text{C}$ for 3 seconds	
Vibration	$\pm 0.25\%$	IEC60068-2-6	
Reflow soldering	lead-free soldering $260^\circ\text{C} / 20\text{s}$		

Ordering Information

Part Number - Resistance - Tolerance
PFS35 10 Ohms 1%

SPECIFICATIONS (continued)

Derating



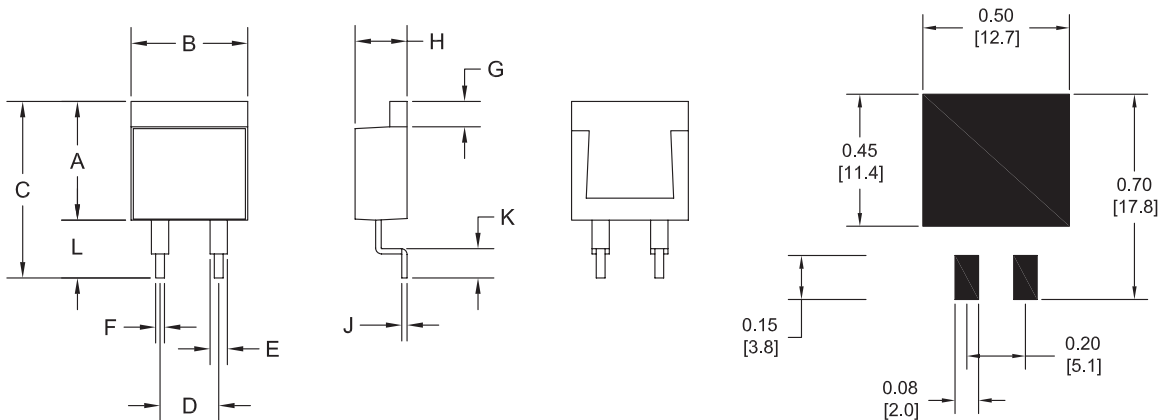
Power Rating Notes -

The PFS35 Series Resistors must be attached to a suitable heatsink. 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	10.3	0.2	0.405	0.008
B	10.1	0.2	0.400	0.008
C	15.3	1.0	4.54	0.04
D	5.08	0.1	0.200	0.004
E	1.5	0.05	0.060	0.002
F	0.75	0.05	0.030	0.002
G	2.2	0.2	0.087	0.008
H	4.5	0.2	0.177	0.008
J	0.5	0.05	0.020	0.002
K	2.5	0.5	0.10	0.02
L	5.0	1.0	0.20	0.04

Note:

Back plate is isolated from both pins.