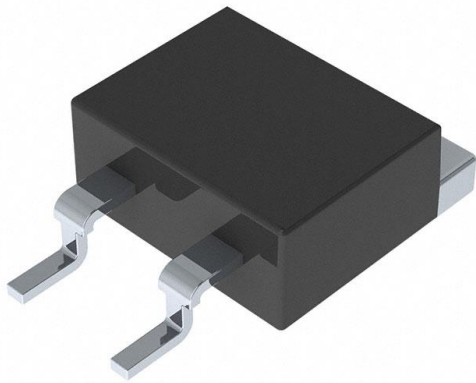


PFS35-0R56F1 Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	PFS35-0R56F1-DG
Manufacturer	Riedon
Manufacturer Product Number	PFS35-0R56F1
Description	RES 0.56 OHM 1% 35W TO263 DPAK
Detailed Description	560 mOhms ±1% 35W Chip Resistor Non-Standard DPAK Current Sense, Pulse Withstanding Thin Film

This model PFS35-0R56F1 is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

PFS35-OR56F1

Series:

PFS35

Resistance:

560 mOhms

Power (Watts):

35W

Features:

Current Sense, Pulse Withstanding

Operating Temperature:

-55°C ~ 155°C

Supplier Device Package:

DPAK in TO-263 Housing

Height - Seated (Max):

0.185" (4.70mm)

Failure Rate:

-

Manufacturer:

Riedon

Product Status:

Active

Tolerance:

±1%

Composition:

Thin Film

Temperature Coefficient:

±100ppm/°C

Package / Case:

Non-Standard DPAK

Size / Dimension:

0.406" L x 0.398" W (10.30mm x 10.10mm)

Number of Terminations:

2

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Affected

HTSUS:

8533.29.0000

Moisture Sensitivity Level (MSL):

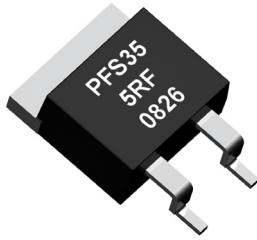
1 (Unlimited)

ECCN:

EAR99

PFS35

Power SMD Film Resistors



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



SPECIFICATIONS

Type	PFS35		
Terminals	2		
Terminal Finish	Tin Plated Copper		
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	$\pm 250\text{ ppm}/^\circ\text{C}$	$\pm 100\text{ ppm}/^\circ\text{C}$	$\pm 50\text{ ppm}/^\circ\text{C}$
Operating Temperature	-55°C to 175°C		
Max Operating Voltage	500V		
Inductance	8.4 nH		
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, +155C 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	
Flammability	UL94V-0		
Reflow soldering	lead-free soldering $260^\circ\text{C} / 20\text{s}$ (2 reflow cycles maximum)		
Moisture Sensitivity Level	MSL-1		
Mass	1.5g		

Ordering Information

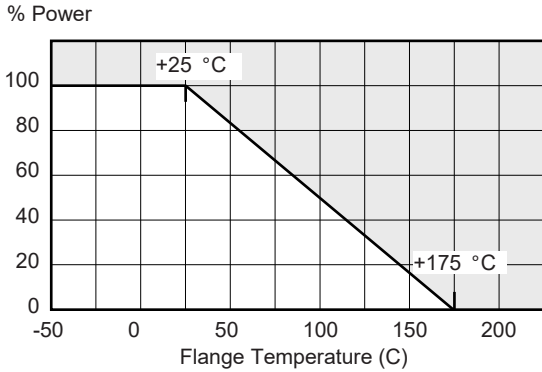
Part Description: Part Type - Resistance - Tolerance
PFS35 10 Ohms 1%

PFS35

Power SMD Film Resistors



Power Derating



Power Rating Notes -

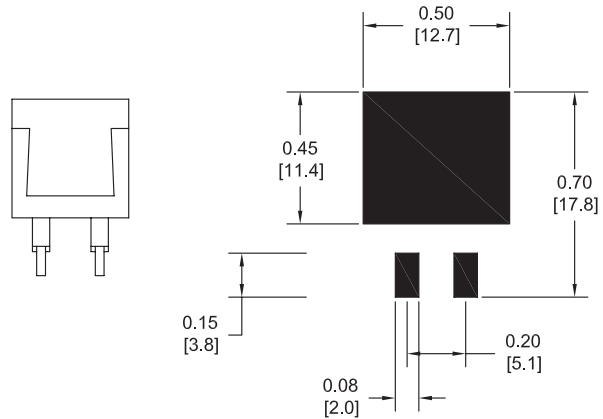
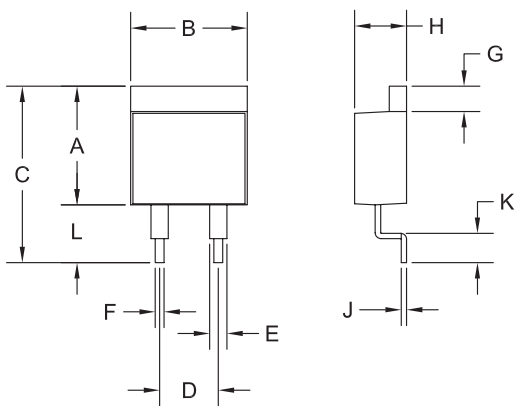
The PFS35 Series Resistors must be attached to a suitable heatsink. The maximum internal resistor temperature is 175°C. To specify an appropriate heatsink use the following formula :

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

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)

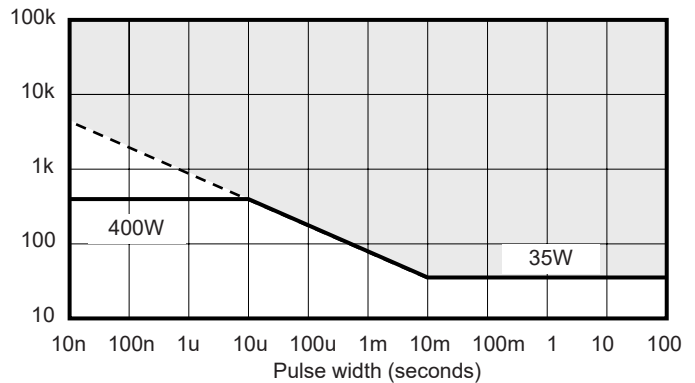
DIMENSIONS

Back plate is isolated from both pins.



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	1.2	0.602	0.047
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

Pulse peak power (W)



Tentative continuous-pulse allowance at duty 0.01. Load life test will be necessary in actual equipment, because curve may be changed by resistance, repetition, duty and derating temperature.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.