

D-PAK Surface Mount Schottky Barrier Rectifiers

(Pb) Lead(Pb)-Free

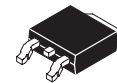
Features:

- *For Surface Mount Application
- *Metal-Semiconductor Junction With Guardring
- *Epitaxial Construction
- *Low Forward Voltage Drop
- *High Current Capability
- *Plastic Material Has UL Flammability Classification 94V-0
- *For Use In Low , And Polarity Protection Applications

Mechanical Data

- *Case : Molded Plastic
- *Polarity : As Marked
- *Weight : 0.295 grams

REVERSE VOLTAGE
40 VOLTS
FORWARD CURRENT
10 AMPERES

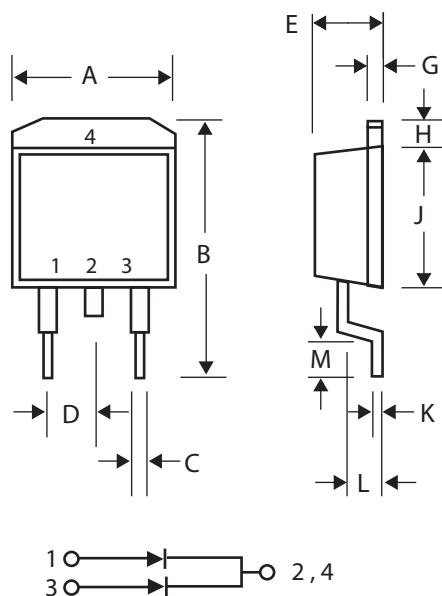


D-PAK(TO-252)

D-PAK Outline Dimension

Unit:mm

D-PAK / TO-252



D-PAK

Dim	Min	Max
A	6.40	6.80
B	9.00	10.00
C	0.50	0.80
D	-	2.30
E	2.20	2.50
G	0.45	0.55
H	1.00	1.60
J	5.40	5.80
K	0.30	0.64
L	0.70	1.70
M	0.90	1.50

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

Characteristic	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	40	V
Maximum RMS Voltage	VRMS	28	V
Maximum DC Blocking Voltage	VDC	40	V
Average Rectifier Forward Current Total Device (Rated V_R), @TC=100°C	IF(AV)	5.0 10	A
Peak Forward Surge Current, 10 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	70	A
Maximum Instantaneous At 5.0A DC @TC =25°C	VF	0.55	V
Maximum DC Reverse Current @TC=25°C At Rated DC Blocking Voltage @TC=125°C	IR	0.5 40	mA
Typical Junction Capacitance	C _J	405	pF
Typical Thermal Resistance Junction to case	R _{θJC}	3.0	°C/W
Operating Temperature Range & Storage Temperature Range	T _J , T _{STG}	-65 to 125	°C

Device Marking

WSD1040CT=1040CT

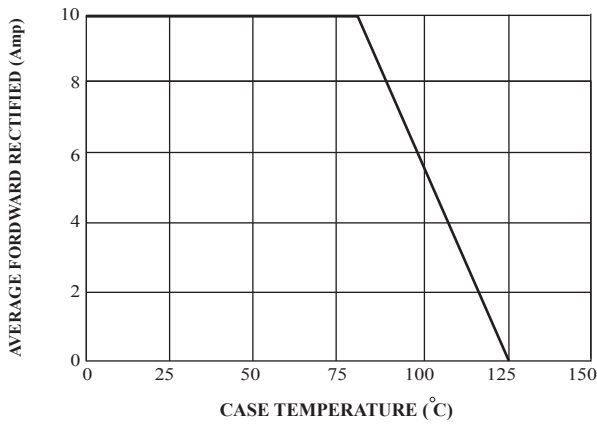


FIG.1 Forward Current Derating Curve

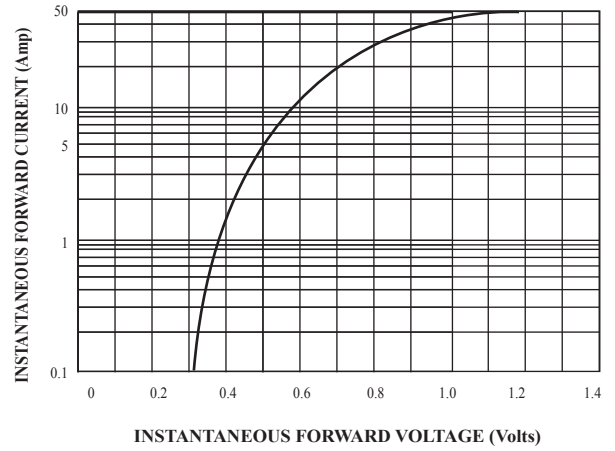


FIG.2 Typical Forward Characteristics

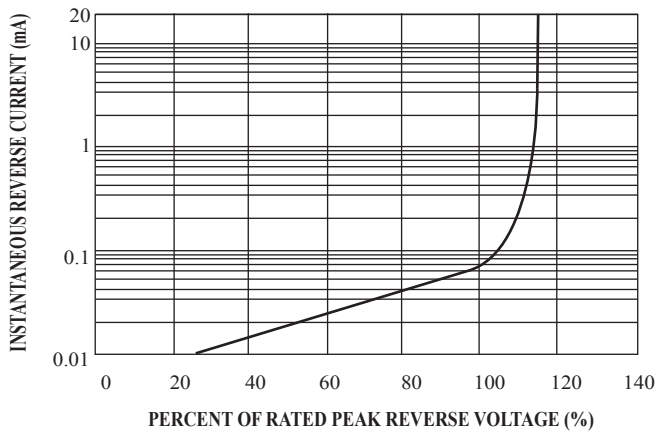


FIG.3 Typical Reverse Characteristics

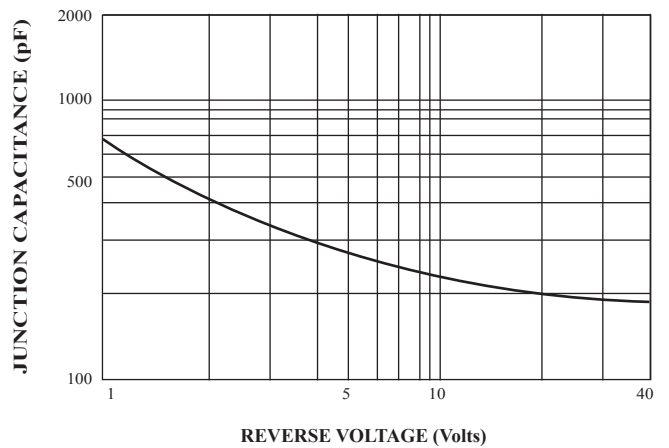


FIG.4 Typical Junction Capacitance

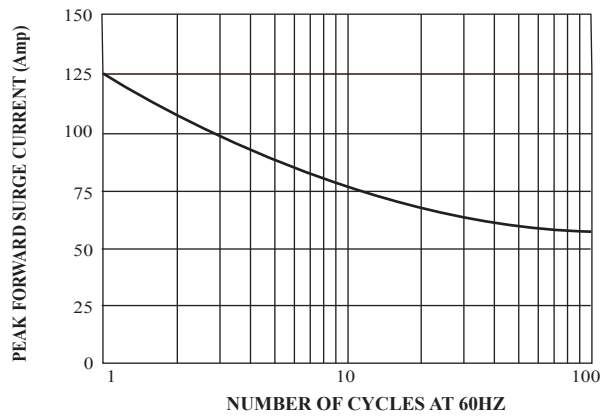


FIG.5 Peak Forward Surge Current