

## D-PAK Surface Mount Schottky Barrier Rectifiers

 Lead(Pb)-Free

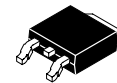
### Features:

- \*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
- \*Device Marking:D1030CT-D1045CT
- \*Weight : 0.011 Ounce ,0.295 grams

**REVERSE VOLTAGE**  
**30 TO 45 VOLTS**  
**FORWARD CURRENT**  
**10 AMPERE**

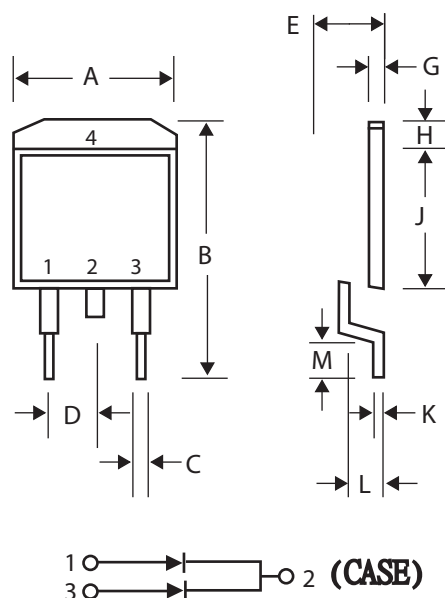


D-PAK(TO-252)

## 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

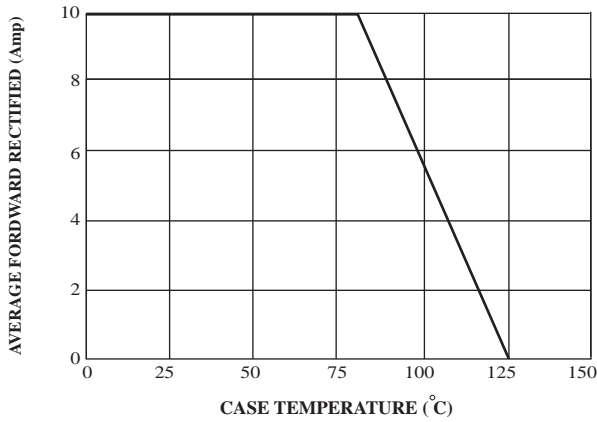
## Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

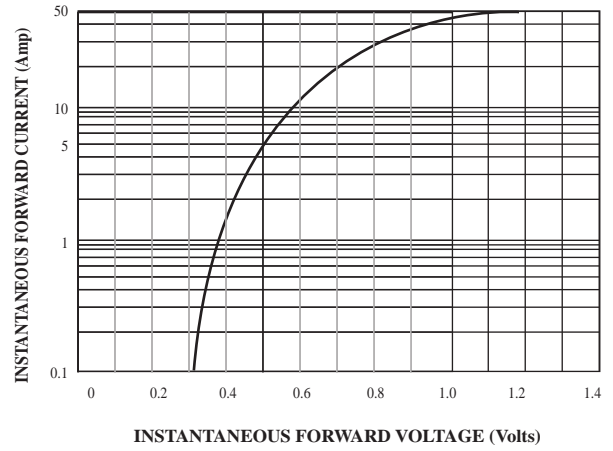
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

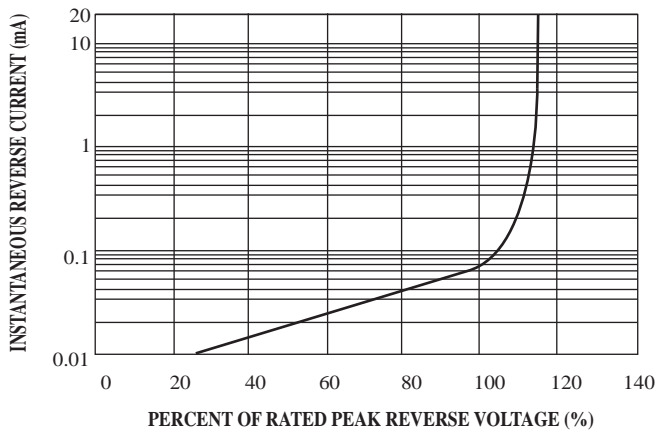
Characteristic	Symbol	WSD10				Unit
		30CT	35CT	40CT	45CT	
Maximum Recurrent Peak Reverse Voltage	VRRM	30	35	40	45	V
Maximum RMS Voltage	VRMS	21	25	28	32	V
Maximum DC Blocking Voltage	VDC	30	35	40	45	V
Average Rectifier Forward Current Total Device (Rated $V_R$ ), @TC=100°C	IF(AV)	5.0 10				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	125				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=100°C	IR	0.5 5.0				mA
Operating Temperature Range & Storage Temperature Range	TJ, TSTG	-65 to 125				°C



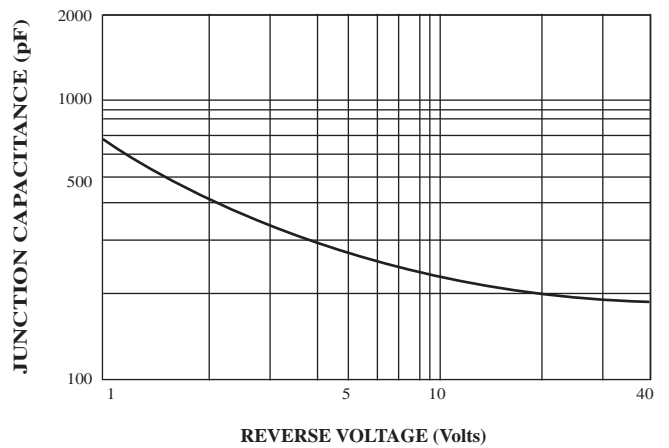
**FIG.1 Forward Current Derating Curve**



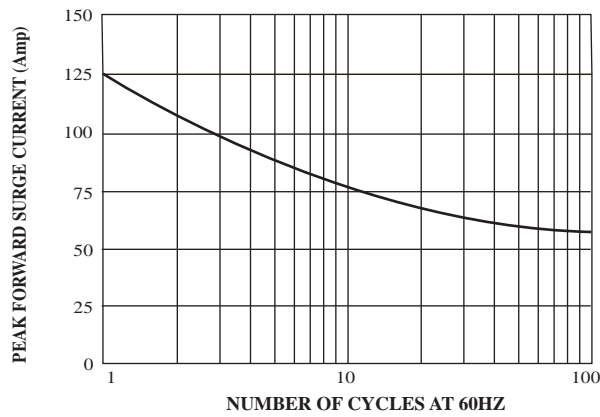
**FIG.2 Typical Forward Characteristics**



**FIG.3 Typical Reverse Characteristics**



**FIG.4 Typical Junction Capacitance**



**FIG.5 Peak Forward Surge Current**