



**WSD1040CT**

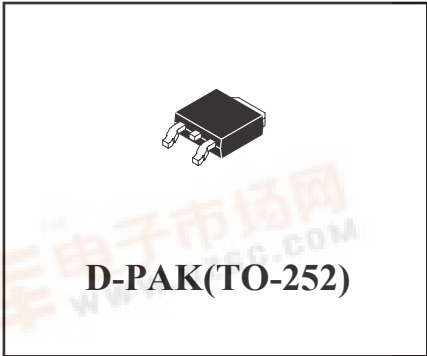
## D-PAK Surface Mount Schottky Barrier Rectifiers

**(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

**REVERSE VOLTAGE  
40 VOLTS  
FORWARD CURRENT  
10 AMPERES**

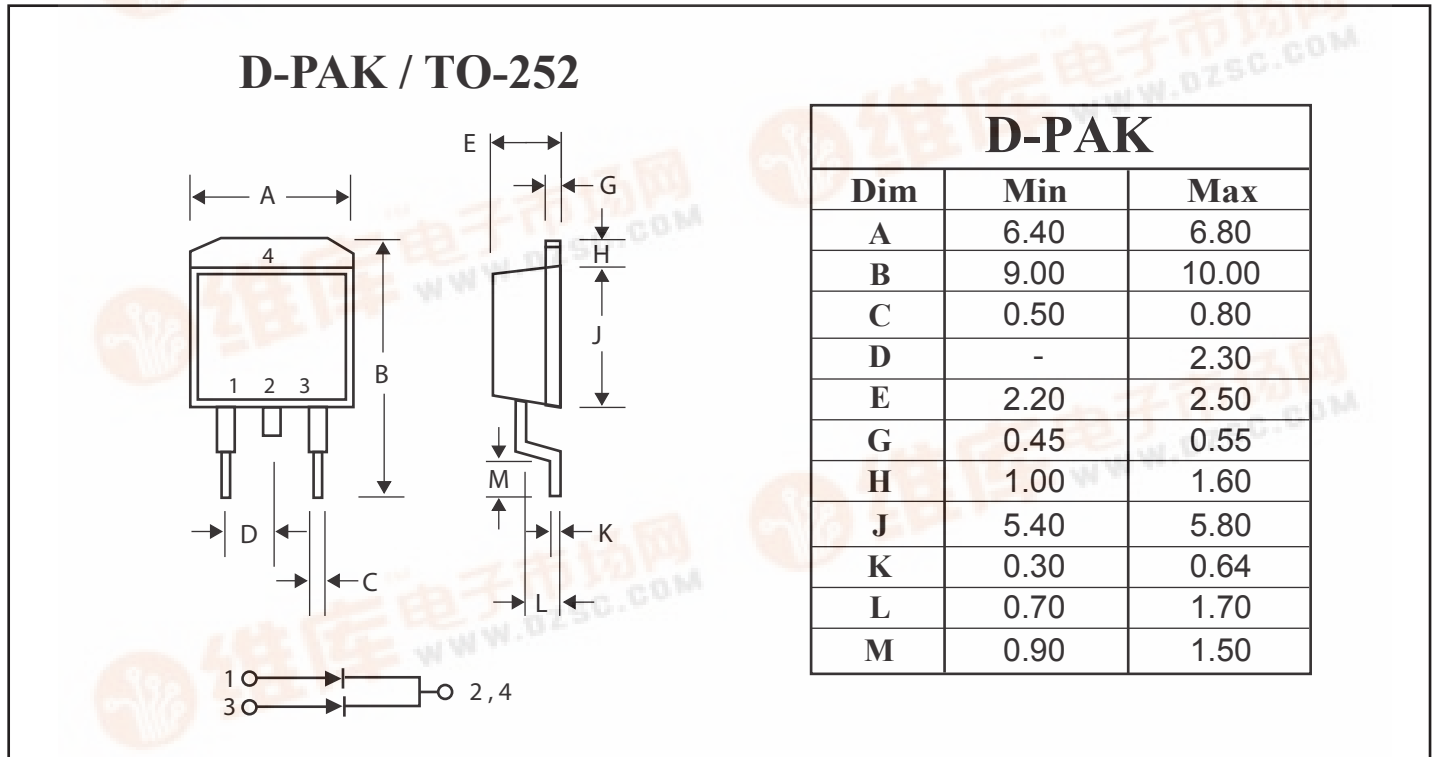


### Mechanical Data

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

## D-PAK Outline Dimension

Unit:mm



## Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

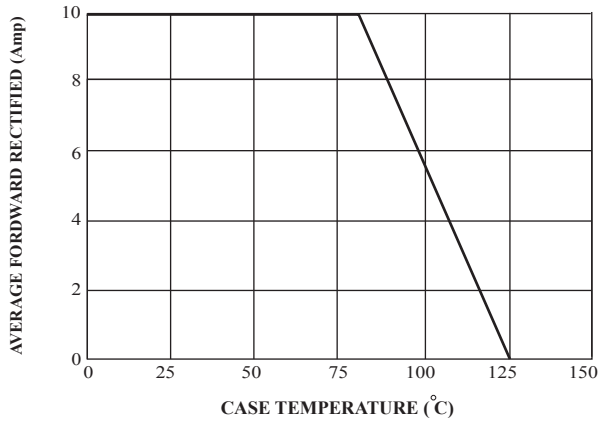
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

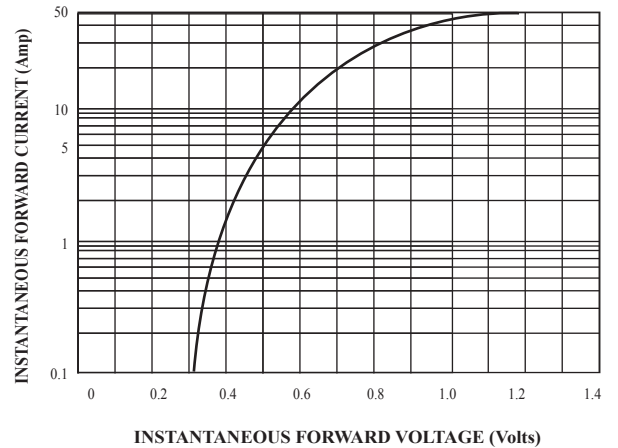
Characteristic	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	40	V
Maximum RMS Voltage	VRMS	28	V
Maximum DC Blocking Voltage	VDC	40	V
Average Rectifier Forward Current Total Device (Rated $V_R$ ), @TC=100°C	IF(AV)	5.0 10	A
Peak Forward Surge Current, 10 ms Single Half Sine-Wave Superimposed 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 <sub>J</sub>	405	pF
Typical Thermal Resistance Junction to case	R <sub>θJC</sub>	3.0	°C/W
Operating Temperature Range & Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to 125	°C

## Device Marking

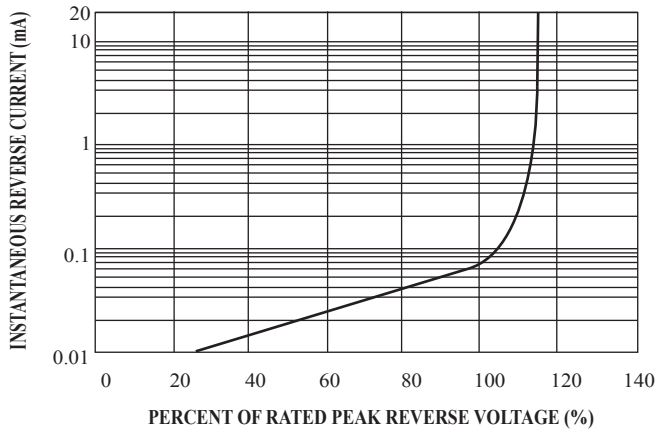
WSD1040CT=1040CT



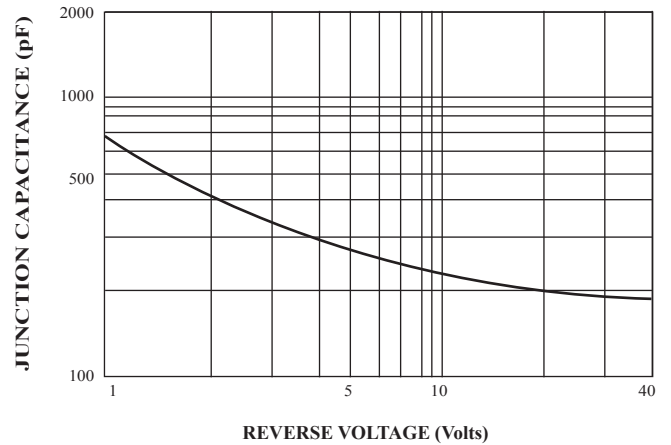
**FIG.1 Forward Current Derating Curve**



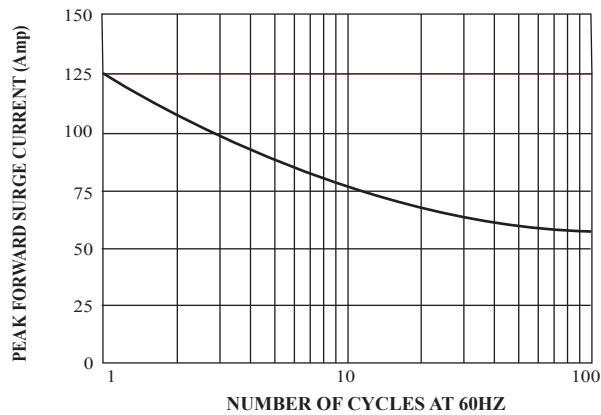
**FIG.2 Typical Forward Characteristics**



**FIG.3 Typical Reverse Characteristics**



**FIG.4 Typical Junction Capacitance**



**FIG.5 Peak Forward Surge Current**