Zibo Seno Electronic Engineering Co., Ltd.

淄博圣诺

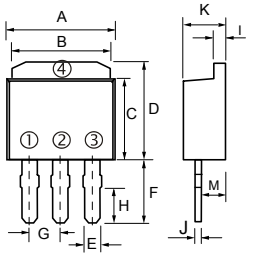
BD540YS-BD5200YS

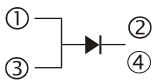
5.0 A SCHOTTKY BARRIER DIODE

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

TO-251AA/IPAK





TO-251AA/IPAK		
DIM.	MIN.	MAX.
A	6.30	6.80
B	5.10	5.50
C	5.90	6.30
D	6.85	7.25
E	0.51	0.90
F	3.95	4.35
G	2.19	2.39
H	2.96	3.16
I	0.40	0.61
J	0.40	0.61
K	2.20	2.40
M	0.71	1.31
All Dimensions in millimeter		

Mechanical Data

- Case: TO-251/IPAK, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	BD540YS	BD545YS	BD550YS	BD560YS	BD580YS	BD5100YS	BD5150YS	BD5200YS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	45	50	60	80	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	31	35	42	56	70	105	140	V
Average Rectified Output Current @T_L = 100°C (Note 1)	I_O	5.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100								A
Forward Voltage @I_F = 5A	V_{FM}	0.70		0.74		0.80		0.90		V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	0.1 20								mA
Typical Junction Capacitance (Note 2)	C_j	350		280		200				pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	15								°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +125		-55 to +150						°C

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

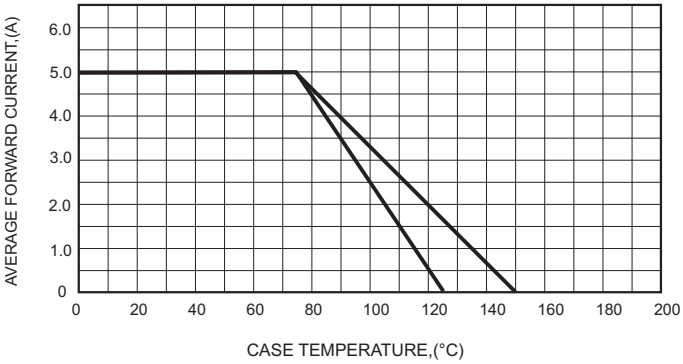


FIG.2-TYPICAL FORWARD CHARACTERISTICS

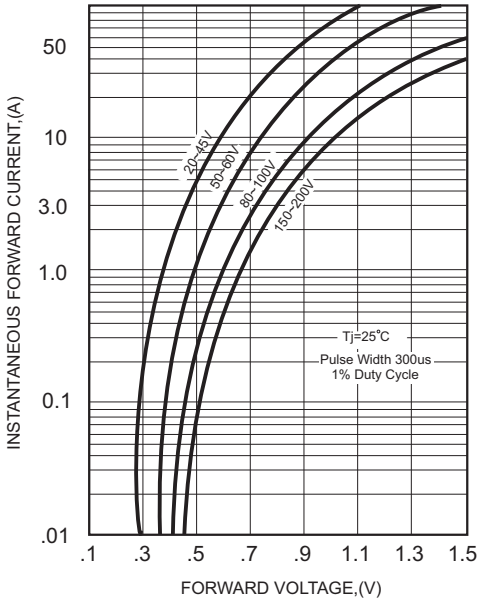


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

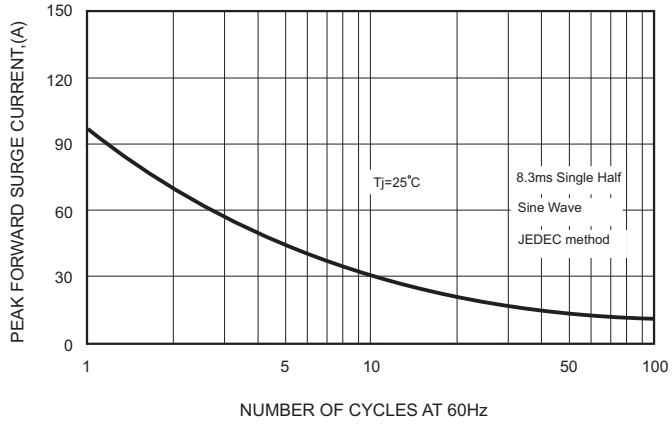
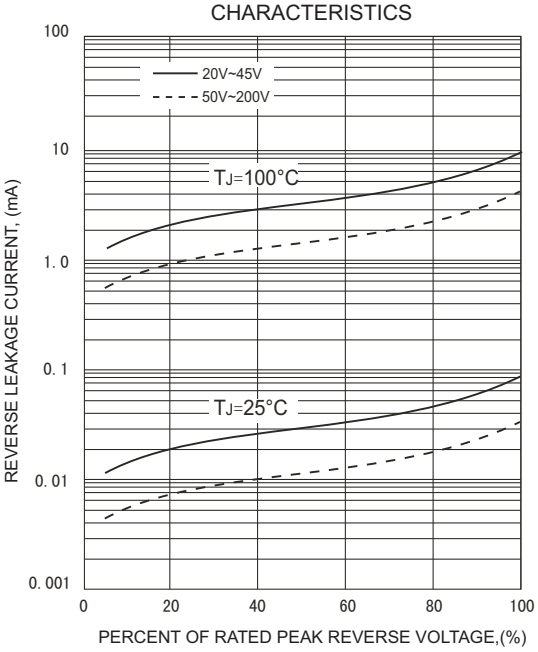


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



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