SB1630PT – SB1660PT

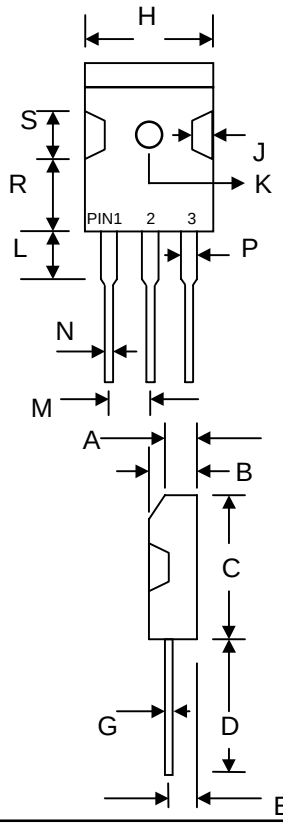
16A SCHOTTKY BARRIER RECTIFIER

Features

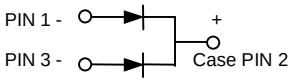
- Schottky Barrier Chip
- Guard Ring for Transient Protection
- High Current Capability, Low Forward
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026
- Polarity: As Marked on Body
- Weight: 5.6 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



TO-3P		
Dim	**Min**	**Max**
A	3.20	3.50
B	4.59	5.16
C	20.80	21.30
D	19.70	20.20
E	2.10	2.40
G	0.51	0.76
H	15.90	16.40
J	1.70	2.70
K	3.10 Ø	3.30 Ø
L	3.50	4.51
M	5.20	5.70
N	1.12	1.22
P	2.90	3.30
R	11.70	12.80
S	4.30 Typical	
All Dimensions in mm		



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	SB 1630PT	SB 1635PT	SB 1640PT	SB 1645PT	SB 1650PT	SB 1660PT	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	35	40	45	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	24.5	28	31.5	35	42	V
Average Rectified Output Current @T_C = 95°C	I_O	16						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250						A
Forward Voltage @I_F = 8.0A	V_{FM}	0.55				0.70		V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	0.5 50						mA
Typical Junction Capacitance (Note 1)	C_j	700						pF
Typical Thermal Resistance Junction to Case (Note 2)	$R_{\theta JC}$	3.5						K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150						°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance junction to case mounted on heatsink.

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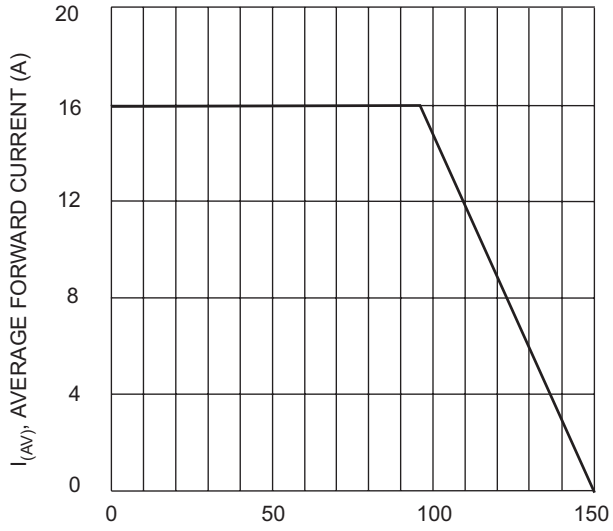

Fig. 1 Forward Current Derating Curve

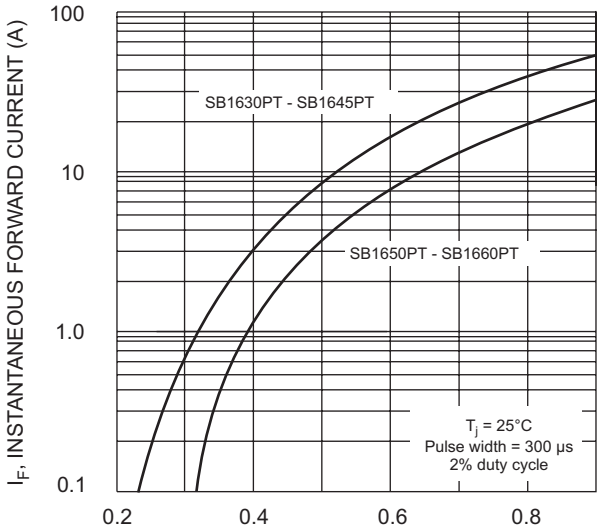

Fig. 2 Typical Forward Characteristics per Element

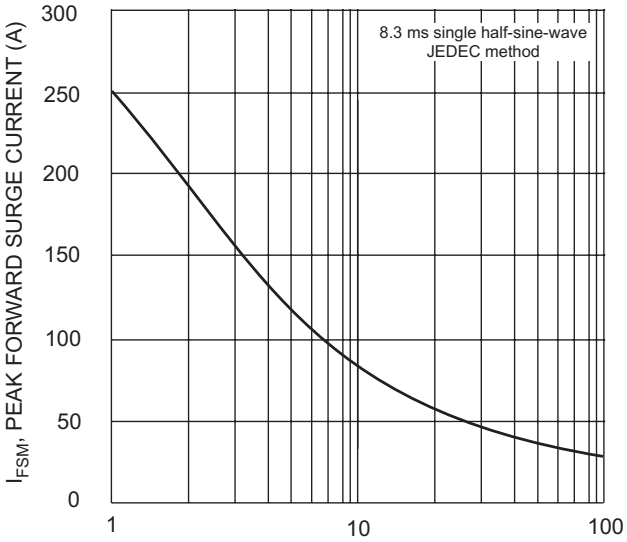

Fig. 3 Max Non-Repetitive Surge Current

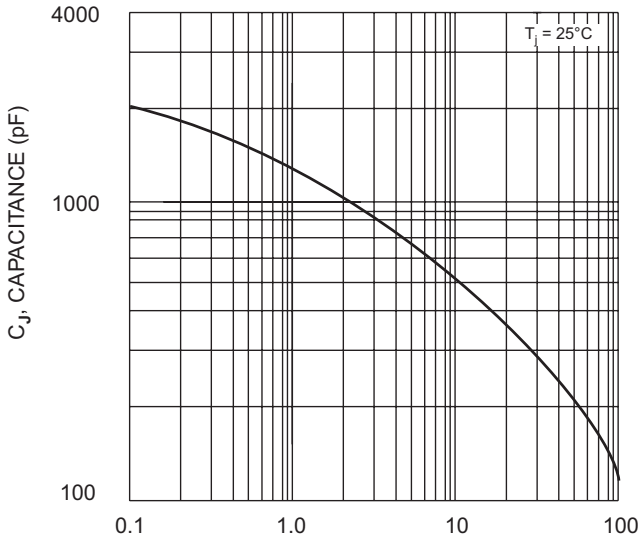

Fig. 4 Typical Junction Capacitance per Element

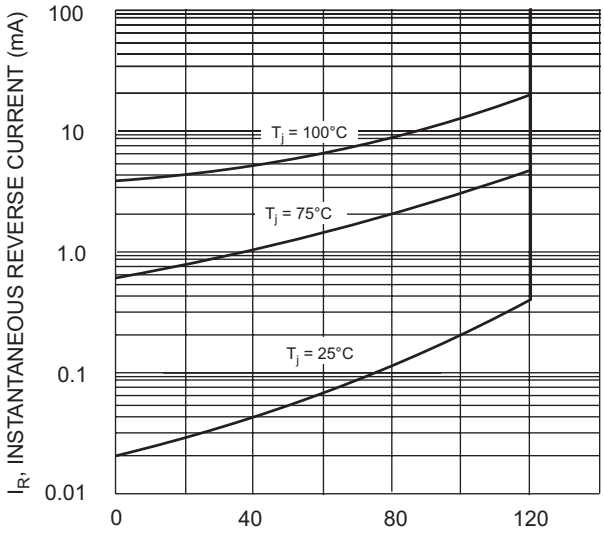

Fig. 5 Typical Reverse Characteristics per Element

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SB1630PT	TO-3P	30 Units/Tube
SB1635PT	TO-3P	30 Units/Tube
SB1640PT	TO-3P	30 Units/Tube
SB1645PT	TO-3P	30 Units/Tube
SB1650PT	TO-3P	30 Units/Tube
SB1660PT	TO-3P	30 Units/Tube

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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