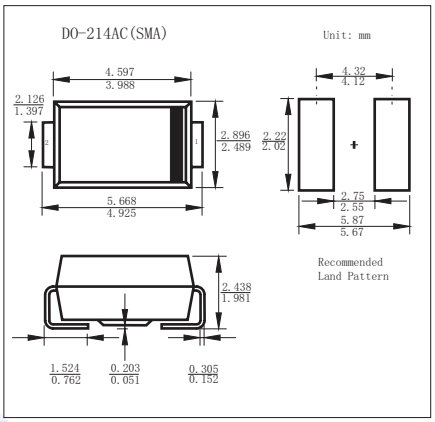
Schottky Barrier Rectifier

B220A ~ B260A



■ Features

- Guard Ring Die Construction for Transient Protection
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 50A Peak
- For use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- High Temperature Soldering: 260°C/10 Second at Terminal

■ Absolute Maximum Ratings (T_A = 25℃ unless otherwise specified)

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

Parameter	Symbol	B220A	B230A	B240A	B250A	B260A	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Working Peak Reverse Voltage	V_{RWM}						
Maximum DC Blocking Voltage	V_R						
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	
Forward Voltage @ I_F = 2.0A	V_{FM}	0.50			0.70		
Averaged Rectified Output Current @ T_T = 100℃	I_O	2.0					A
Non-Repetitive Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50					
Peak Reverse Current @ T_A=25℃	I_{RM}	0.5					mA
at Rated DC Blocking Voltage @ T_A=100℃		20					
Typical Total Capacitance (Note 1)	C_T	200					pF
Typical thermal resistance, Junction to Terminal	R_{thJT}	20					℃/W
Typical thermal resistance, Junction to Ambient (Note 2)	R_{thJA}	25					
Junction Temperature	T_j	150					℃
Storage Temperature	T_{stg}	-55 to 150					

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 V DC.

2. Thermal Resistance: Junction to terminal, unit mounted on PC board with 5.0mm^2 (0.013mm thick) copper pad as heat sink.

■ Marking

NO.	B220A	B230A	B240A	B250A	B260A
Marking	B220A	B230A	B240A	B250A	B260A

Schottky Barrier Rectifier

B220A ~ B260A

■ Typical Characterisitics

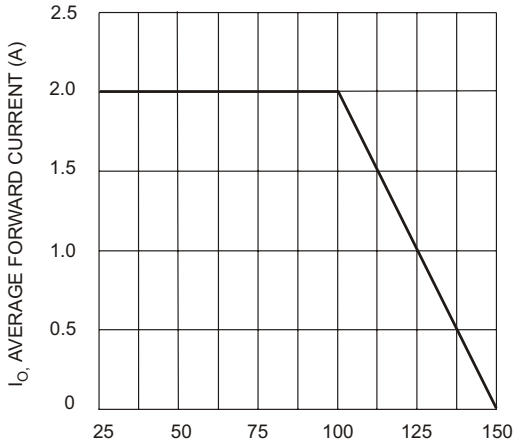


Fig. 1 Forward Current Derating Curve

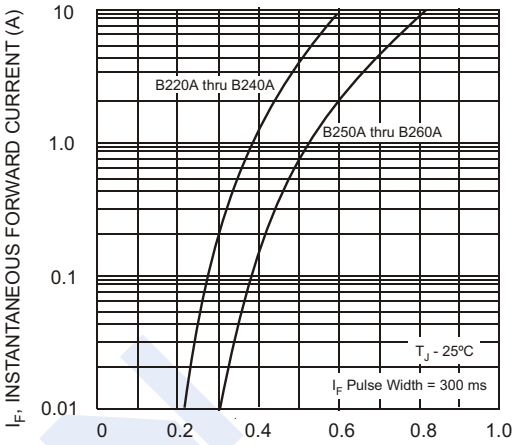


Fig. 2 Typical Forward Characteristics

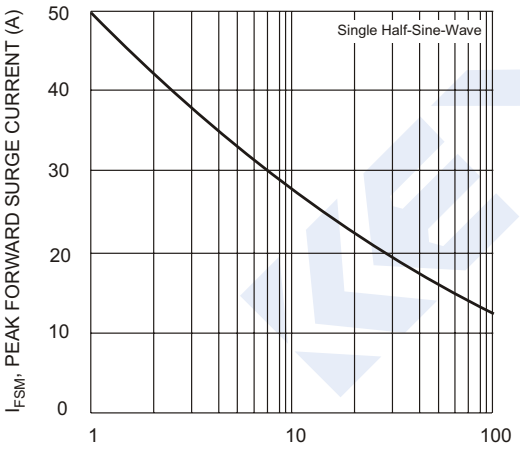


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

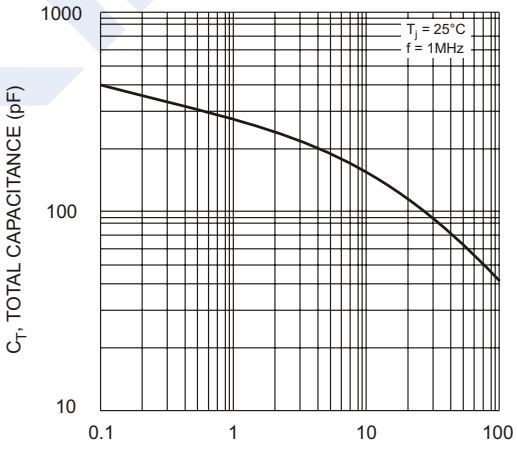


Fig. 4 Typical Total Capacitance

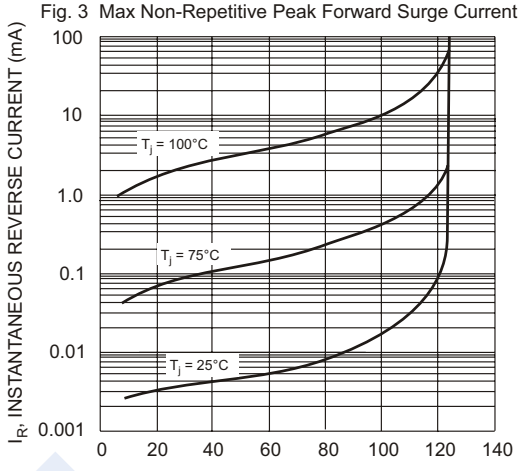


Fig. 5 Typical Reverse Characteristics

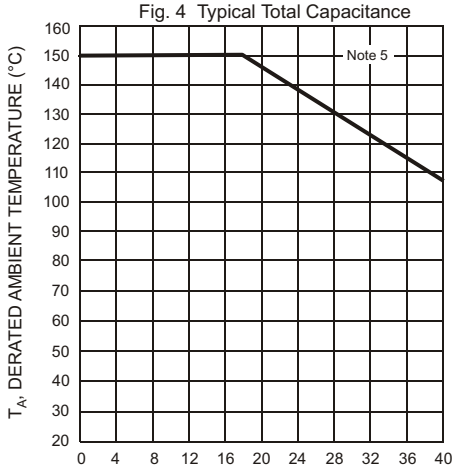


Fig. 6 Operating Temperature Derating (B240)