

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

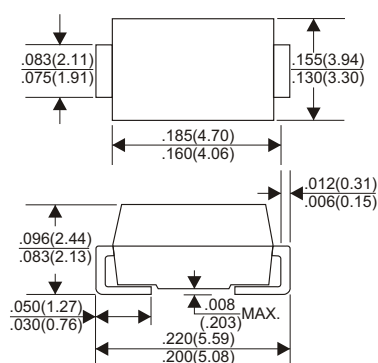
VOLTAGE RANGE

20 to 60 Volts

CURRENT

3.0Ampere

DO-214AA(SMB)



Dimensions in inches and (millimeters)

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

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

Characteristic	Symbol	B320B	B330B	B340B	B350B	B360B	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Working Peak Reverse Voltage	V _{RWM}						
DC Blocking Voltage	V _R						
Average Rectified Output Current @ T _T = +100°C	I _O	3.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100					A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Terminal (Note 6)	R _{θJT}	25	°C/W
Typical Thermal Resistance, Junction to Ambient (Note 6)	R _{θJA}	95	°C/W
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

B320B THRU B360B

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V _F	—	—	0.50	V	I _F = 3.0A, T _A = +25°C
B320B,B330B,B340B B350B, B360B		—	—	0.70		
Leakage Current (Note 7)	I _R	—	—	0.5	mA	@ Rated V _R , T _A = +25°C
		—	—	20		@ Rated V _R , T _A = +100°C
Total Capacitance	C _T	—	—	200	pF	V _R = 4V, f = 1MHz

Notes: 6. Thermal Resistance: Junction to terminal, unit mounted on glass epoxy substrate with 2x3mm copper pad.
7. Short duration pulse test used to minimize self-heating effect.

RATING AND CHARACTERISTIC CURVES (B320B THRU B360B)

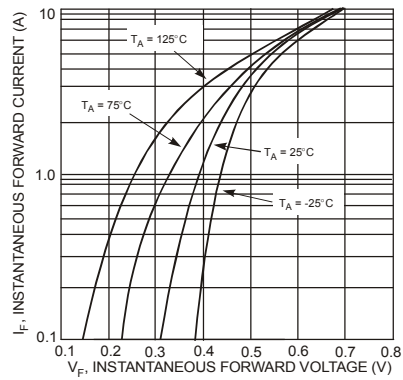


Figure 1 Typical Forward Characteristics - B320B thru B340B

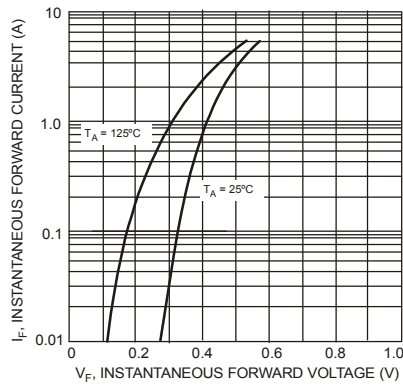


Figure 2 Typical Forward Characteristics - B350B thru B360B

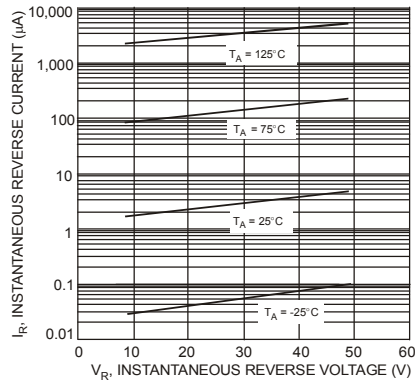


Figure 3 Typical Reverse Characteristics, B320B thru B340B

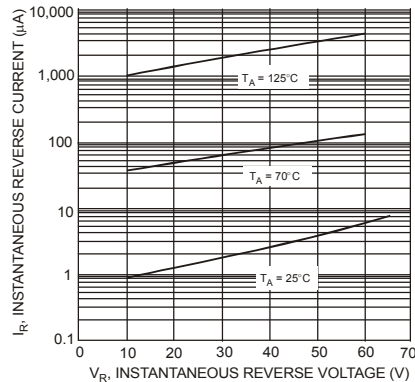


Figure 4 Typical Reverse Characteristics, B350B thru B360B

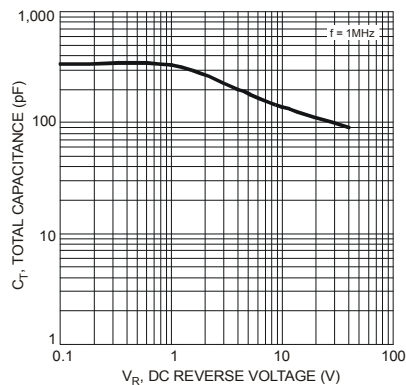


Figure 5 Total Capacitance vs. Reverse Voltage

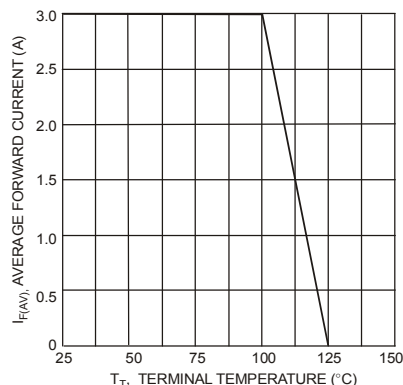


Figure 6 Forward Current Derating Curve

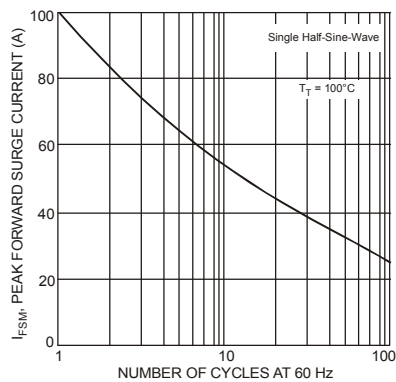


Figure 7 Max Non-Repetitive Peak Forward Surge Current