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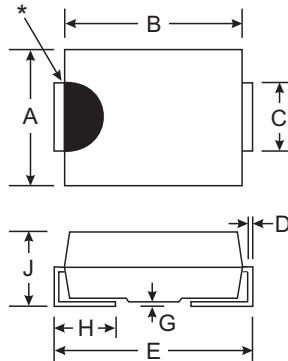
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Jameco Part Number 1538857

Features

- Guard Ring Die Construction for Transient Protection
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 125A Peak
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application
- Lead Free Finish/RoHS Compliant (Note 4)



SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62

All Dimensions in mm

Mechanical Data

- Case: SMC
- Case Material: Molded Plastic. UL Flammability Classification 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Lead Free Plating (Matte Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number (See Page 3)
- Approximate Weight: 0.21 grams

*: Note: Device may have a semicircular indentation/notch on one side of the device (as shown).

Maximum Ratings and Electrical Characteristics

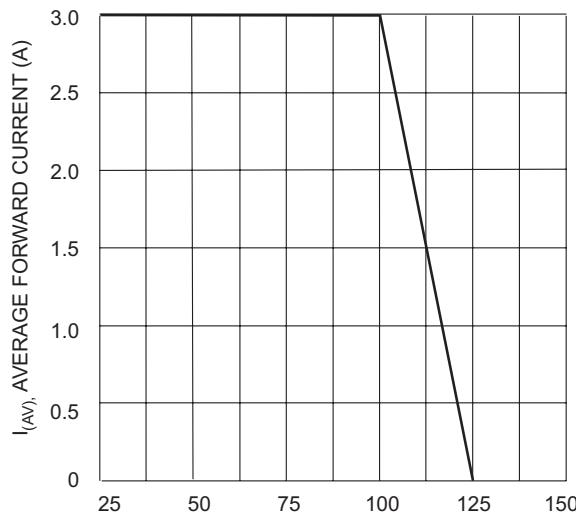
© TA = 25°C unless otherwise specified

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

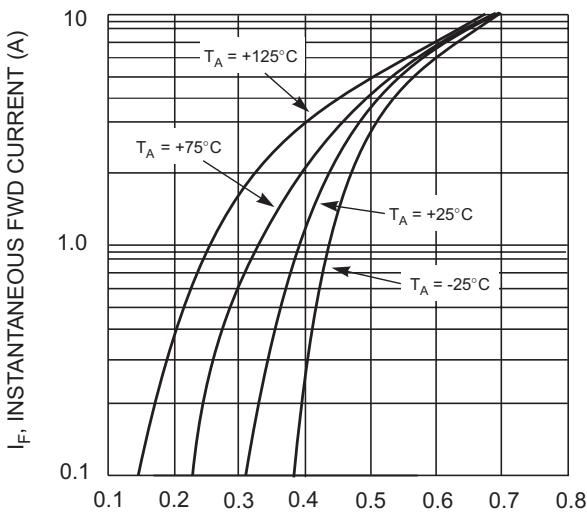
Characteristic	Symbol	B320	B330	B340	B350	B360	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	30	40	50	60	V
RMS Reverse Voltage	V _R (RMS)	14	21	28	35	42	V
Average Rectified Output Current @ T _T = 100°C	I _O			3.0			A
Non-Repetitive Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}			125			A
Forward Voltage (Note 3) @ I _F = 3.0A	V _{FM}		0.50		0.70		V
Peak Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage (Note 3) @ T _A = 100°C	I _{RM}			0.5 20			mA
Typical Capacitance (Note 2)	C _T			200			pF
Typical Thermal Resistance, Junction to Terminal	R _{θJT}			20			°C/W
Typical Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}			90			°C/W
Operating Temperature Range	T _j			-55 to +125			°C
Storage Temperature Range	T _{STG}			-55 to +150			°C

Notes:

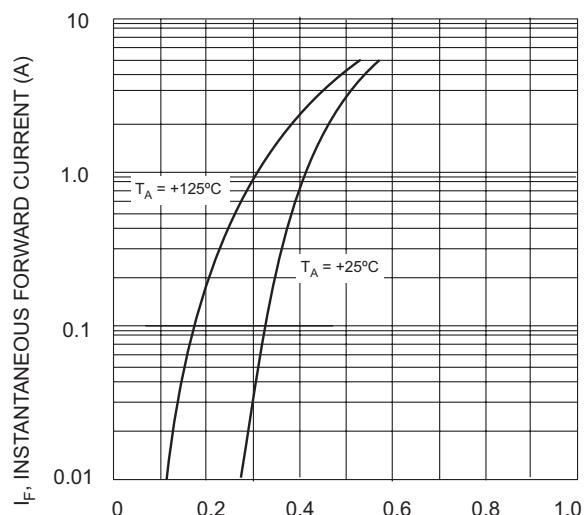
- Thermal Resistance: Junction to terminal, unit mounted on glass epoxy substrate with 2x3mm copper pad.
- Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
- Short duration test pulse used to minimize self-heating effect.
- RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



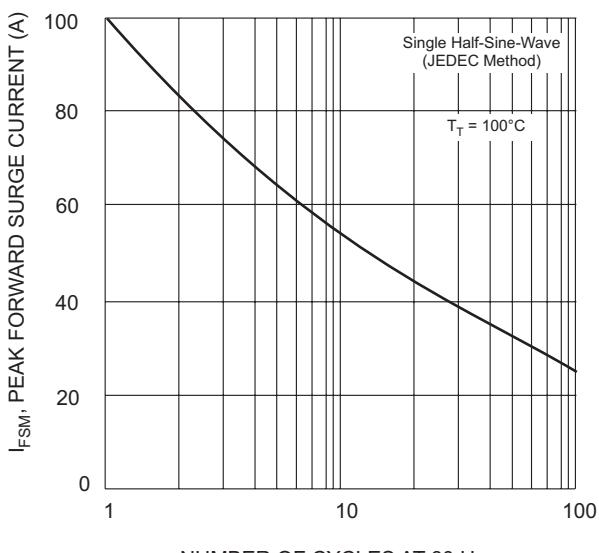
T_T, TERMINAL TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



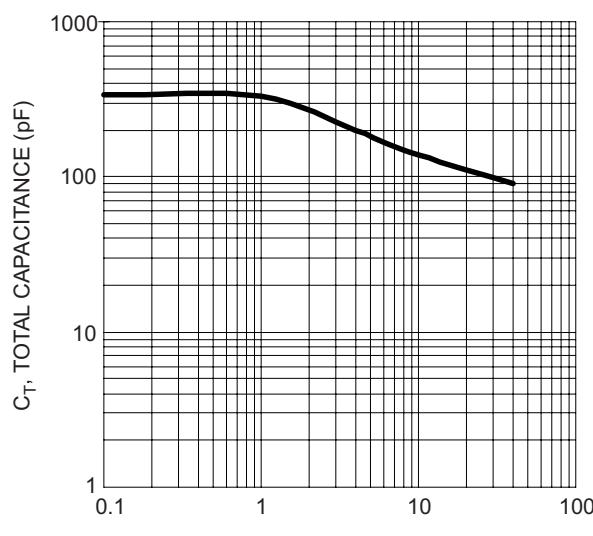
V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics - B320B thru B340B



V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 3 Typ. Forward Characteristics - B350B thru B360B

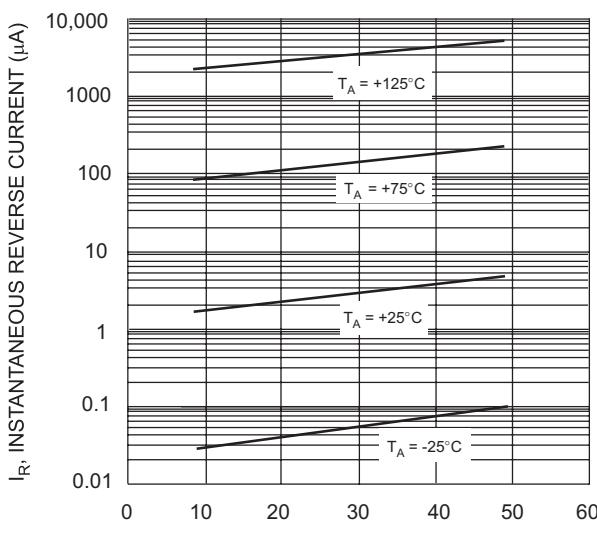


NUMBER OF CYCLES AT 60 Hz
Fig. 4 Max Non-Repetitive Peak Fwd Surge Current



V_R, REVERSE VOLTAGE (V)

Fig. 5 Typical Capacitance



V_R, INSTANTANEOUS REVERSE VOLTAGE (V)
Fig. 6 Typical Reverse Characteristics, B320B thru B340B

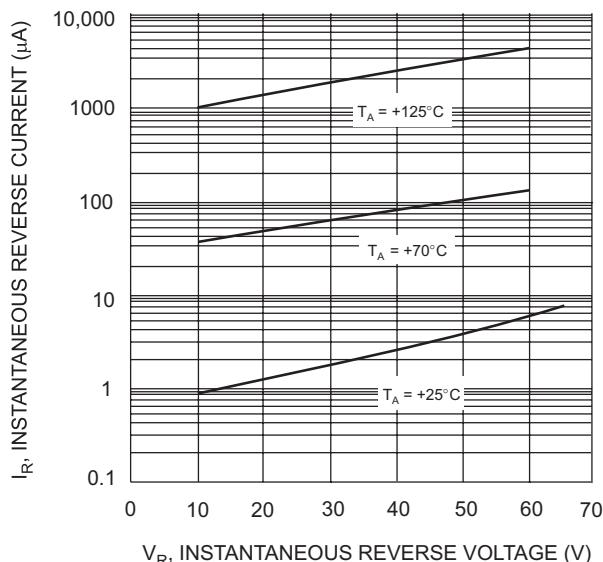


Fig. 7 Typical Reverse Characteristics, B350B thru B360B

Ordering Information (Note 5)

Device*	Packaging	Shipping
B3XX-13-F	SMC	3000/Tape & Reel

Notes: 5. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

* xx = Device type, e.g. B320-13-F (SMC package).



DC = Manufacturers' code marking
 YWW = Date code marking
 Y = Last digit of year ex: 2 for 2002
 WW = Week code 01 to 52

Note: Device has a cathode band (as shown above) and may also have a cathode notch (as shown on Page 1).

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