

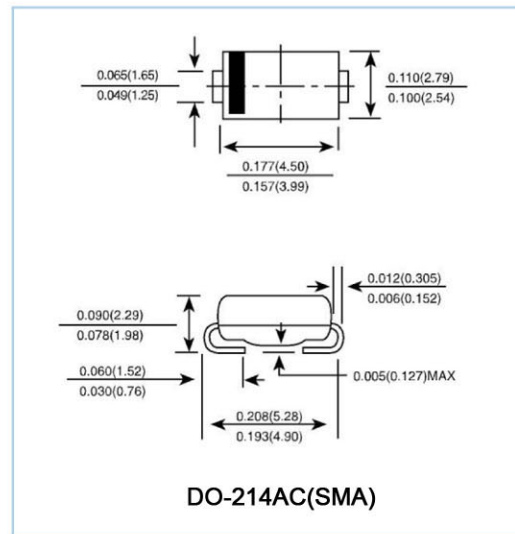
B120 - B160

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL - STD - 750, Method 2026
High temperature soldering guaranteed: 250°C/10 seconds at terminals
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified

Maximum Ratings and Thermal Characteristics

Parameter	Symbol	B120	B130	B140	B150	B160	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	V
Maximum average forward rectified current at T _L (See Fig. 1)	I _{F(AV)}	1.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	40					A
Typical thermal resistance ⁽²⁾	R _{JA} R _{JL}	88 28					°C/W
Operating junction temperature range	T _J	-65 to +125			-65 to +150		°C
Storage temperature range	T _{STG}	-65 to +150					°C

Electrical Characteristics

Maximum instantaneous forward voltage at 1.0A ⁽¹⁾	V _F	0.50		0.75		V	
Maximum DC reverse current at rated DC blocking voltage ⁽¹⁾	I _R	0.2					mA
		6.0		5.0			

Notes: (1) Pulse test: 300 μs pulse width, 1% duty cycle
(2) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

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Fig. 1 - Forward Current Derating Curve

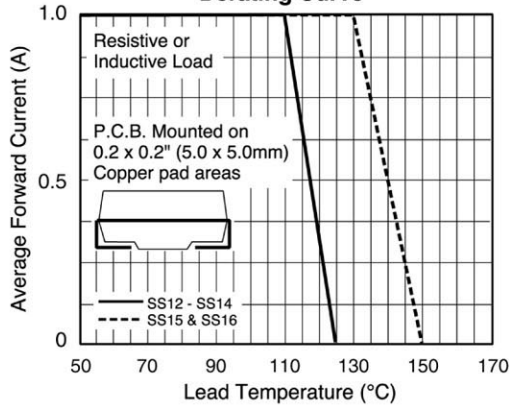


Fig. 2 - Maximum Non-repetitive Surge Current

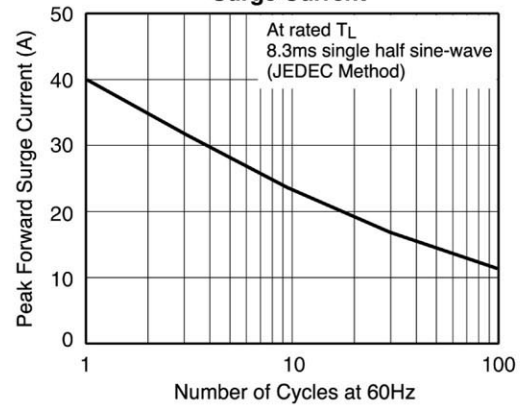


Fig. 3 - Typical Instantaneous Forward Characteristics

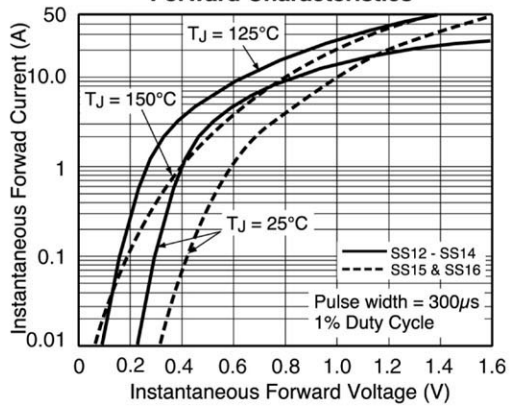


Fig. 4 - Typical Reverse Current Characteristics

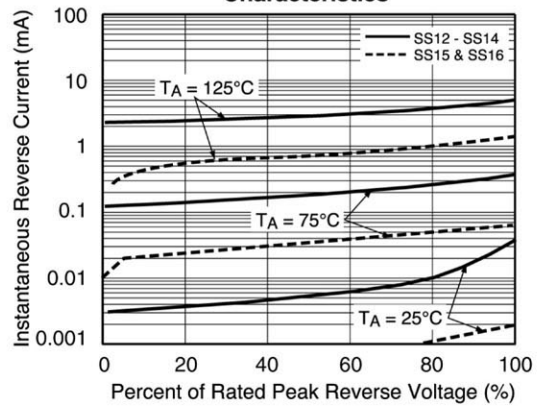


Fig. 5 - Typical Junction Capacitance

