



S510L

LOW VF SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 100 Volts **CURRENT** 5.0 Amperes

SMC / DO-214AB

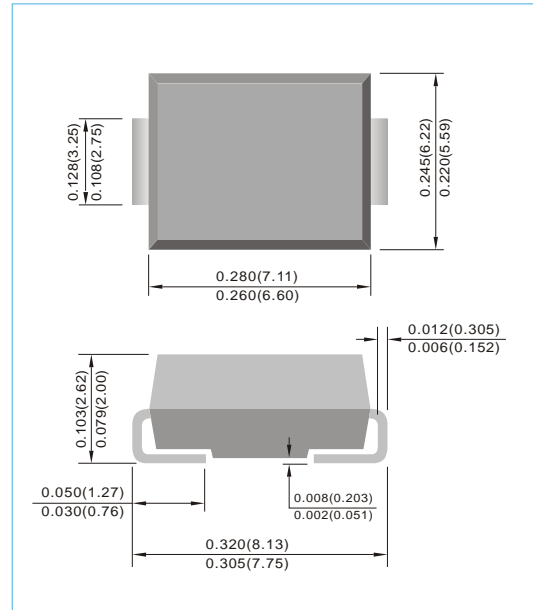
Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounce, 0.2325 gram



MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	100	V
Maximum rms voltage	V _{RMS}	70	V
Maximum average forward rectified current	I _{F(AV)}	5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	250	A
Typical thermal resistance	R _{θJA}	90	°C/W
Operating junction temperature range	T _J	-55 to + 150	°C
Storage temperature range	T _{STG}	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =0.5mA	100	-	V
Instantaneous forward voltage	V _F	I _F =1A I _F =3A I _F =5A T _A =25°C	0.44 0.58 0.68	- - 0.70	V
		I _F =1A I _F =3A I _F =5A T _A =125°C	0.35 0.49 0.56	- - 0.6	V
		Reverse current	I _R	V _R =70V	10
		V _R =100V	-	50	μA
		T _A =25°C	-	50	μA
		T _A =125°C	-	50	mA



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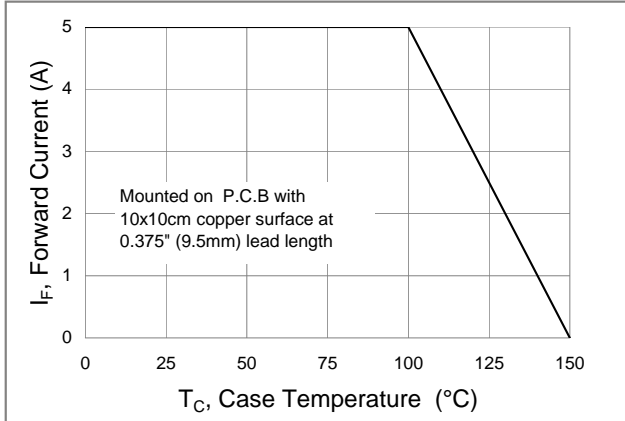


Fig.1 Forward Current Derating Curve

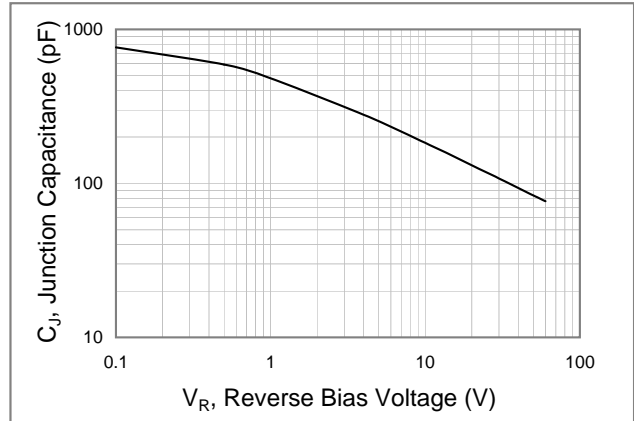


Fig.2 Typical Junction Capacitance

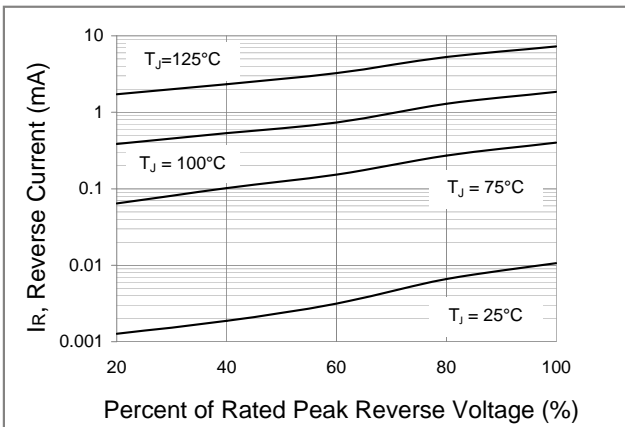


Fig.3 Typical Reverse Characteristics

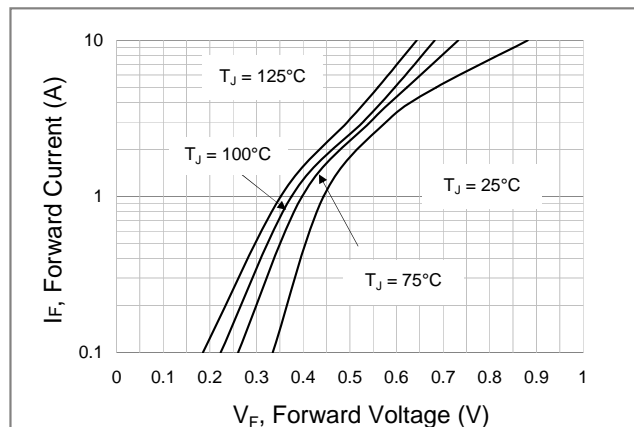
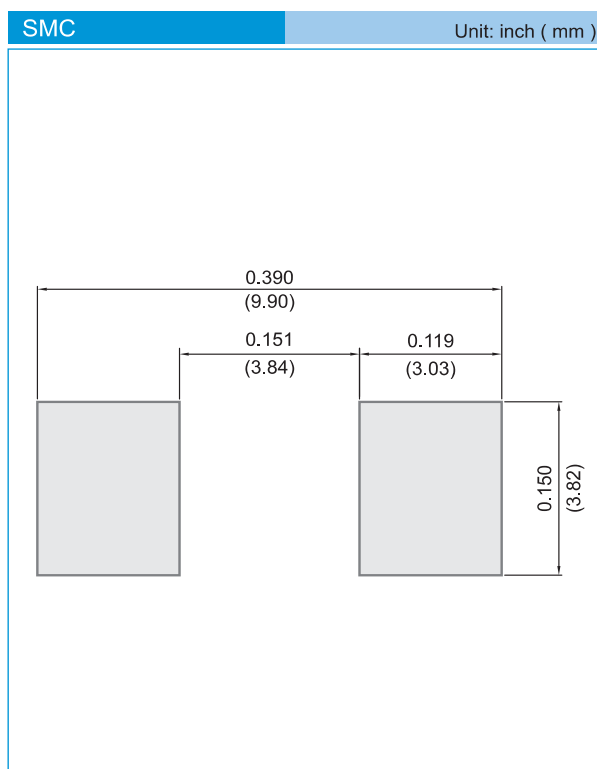


Fig.4 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.5Kper 7" plastic Reel

LEGAL STATEMENT

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