



S510L

LOW VF SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 100 Volt **CURRENT** 5 Ampere

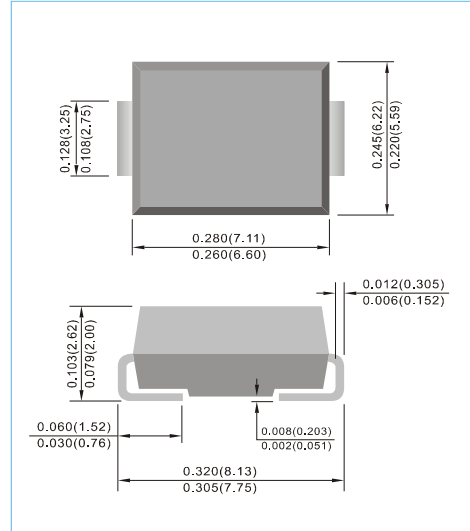
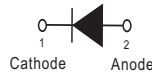
SMC / DO-214AB Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Lead free in compliance with EU RoHS 2.0
- GGreen molding compound as per IEC 61249 standard

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 ounces, 0.2325 grams



MAXIMUM RATINGS (TA=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 (TA=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
Reverse current	I _R	V _R =100V T _A =25°C	-	50	μA
		V _R =100V T _A =125°C	-	50	mA



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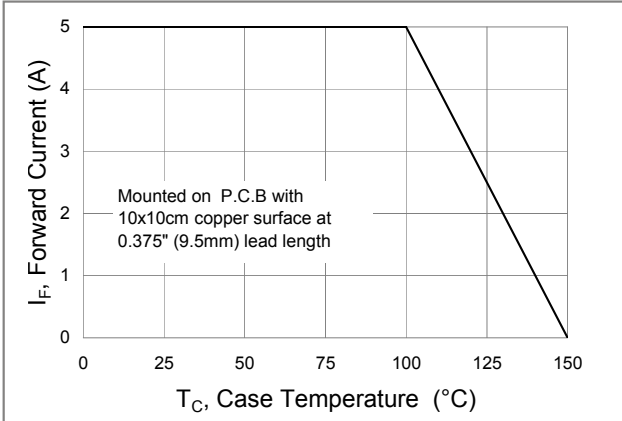


Fig.1 Forward Current Derating Curve

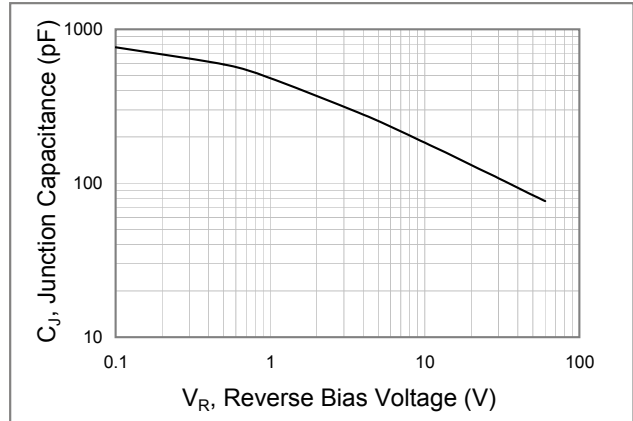


Fig.2 Typical Junction Capacitance

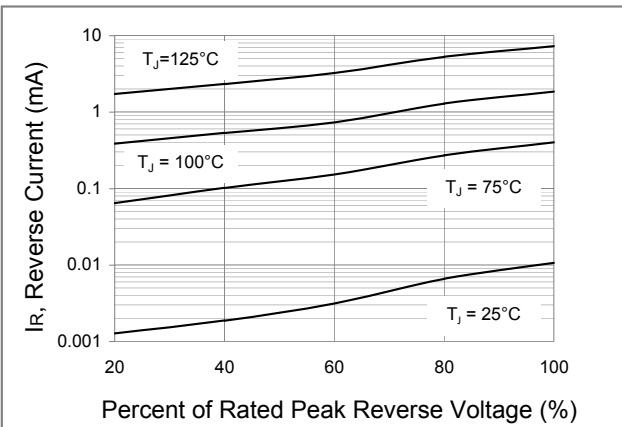


Fig.3 Typical Reverse Characteristics

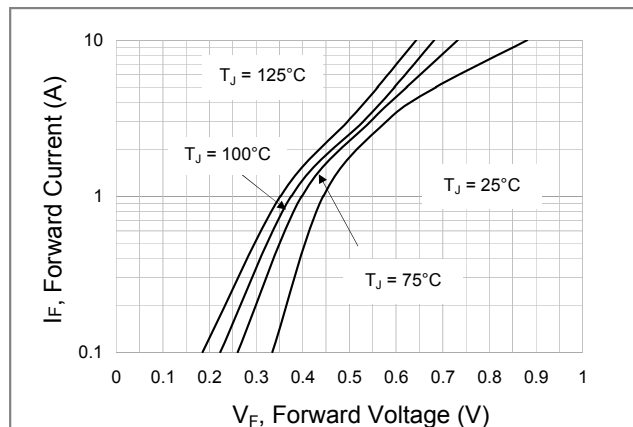


Fig.4 Typical Forward Characteristics

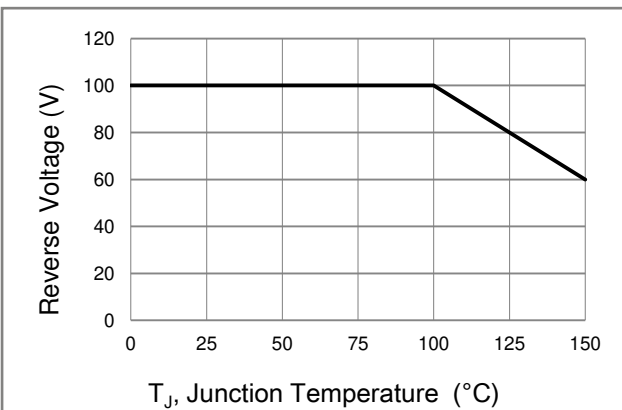
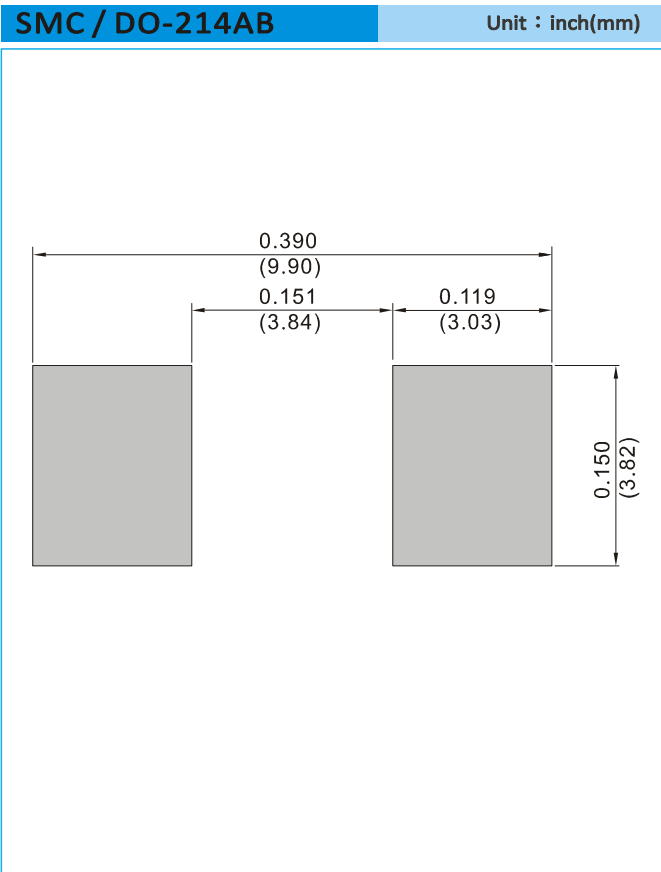


Fig.5 Operating Temperature Derating Curve



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 3K per 13" plastic Reel
 - T/R - 0.8K per 7" plastic Reel



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Part No_packing code_Version

S510L_R1_00001

S510L_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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