


SMC		Features					
		<ul style="list-style-type: none"> • Low forward voltage drop • High current capability • Moisture sensitivity: level 1, per J-STD-020 PB • AEC-Q101 qualified • High temperature soldering guaranteed: 260°C/10 seconds • Halogen-free according to IEC 61249-2-21 definition 					
Primary characteristics		Applications					
$I_{F(AV)}$	3A	For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications					
V_{RRM}	70V to 100V						
I_{FSM}	100A						
I_{RM}	0.03mA						
V_{FM} at $I_F=3A$	0.79V						
T_J max.	150 °C						
		Mechanical data					
		<ul style="list-style-type: none"> • SMC • Epoxy meets UL 94 V-0 flammability rating • Terminals: Tin plated leads. • Polarity: As marked. 					
Maximum rating (Ta=25°C unless otherwise noted)							
Parameter	Sym	SMC				Unit	
		SS37	SS38	SS39	SS3B		
Max. repetitive peak reverse voltage	V_{RRM}	70	80	90	100	V	
Max. RMS reverse voltage	V_{RMS}	49	56	63	70	V	
Max. DC blocking voltage	V_{DC}	70	80	90	100	V	
Max. average forward current	$I_{F(AV)}$	3				A	
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	100				A	
Max. instantaneous forward voltage drop per diode	V_{FM}	0.79				V	
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	0.03				mA	
	Ta=125 °C	2					
Operating junction temperature	T_J	-55 ~ +150				°C	
Storage temperature	T_{STG}	-55 ~ +150				°C	
Typical thermal resistance (Note1)	$R_{\theta J-L}$	15				°C/W	
	$R_{\theta J-A}$	65					
	$R_{\theta J-C}$	25					

Notes:

1 The thermal resistance from junction to lead, ambient and cover.



SS37 thru SS3B. Surface Mounted Schottky Barrier Rectifiers

Ordering information (Example)

PREFERRED	UNITWEIGHT(g)	PREFERREDPACKAGECODE	BASEQUANTITY	DELIVERYMODE
SS37				

Typical characteristics

(TA = 25°C unless otherwise noted)

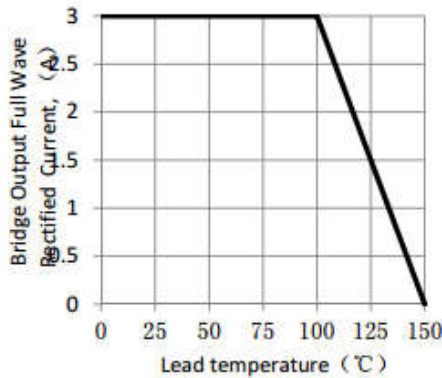


Figure 1. Forward Current Derating Curve

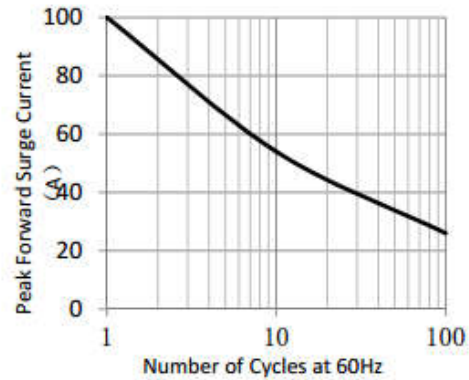


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

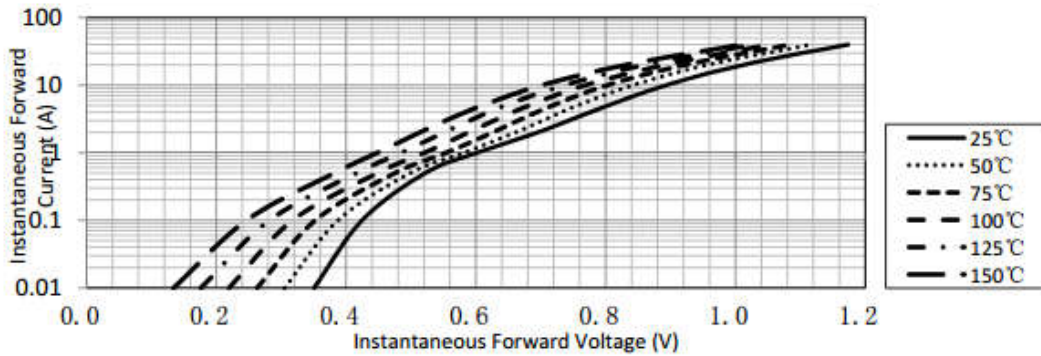


Figure 3. Typical Instantaneous Forward Characteristics

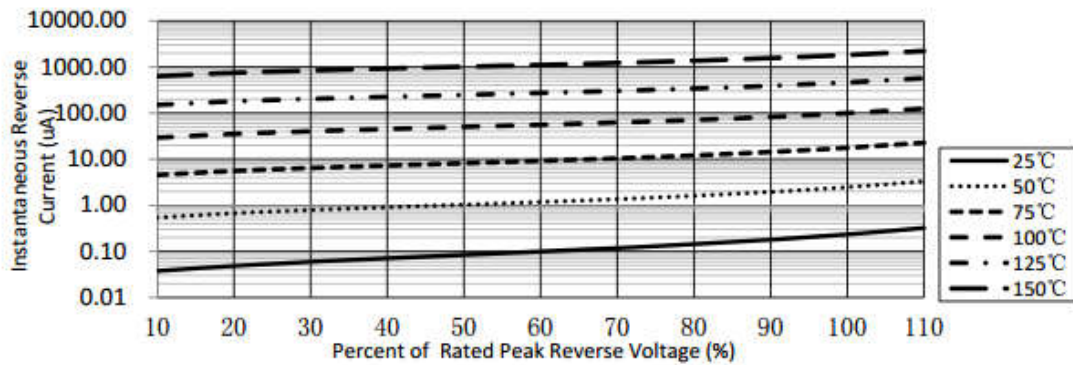
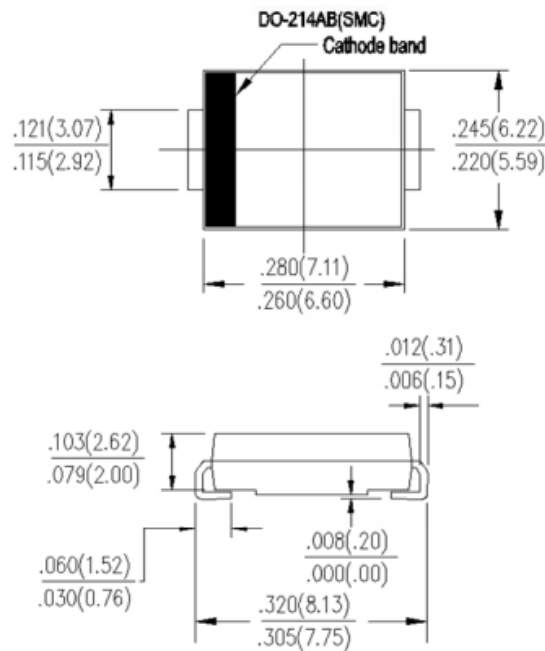


Figure 4. Typical Reverse Characteristics



Package outline dimensions



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