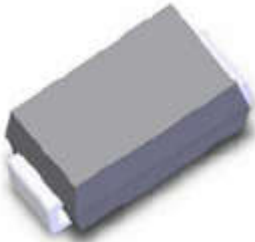


SMA		Features						
		<ul style="list-style-type: none"> • Low forward voltage drop • High current capability • Moisture sensitivity: level 1, per J-STD-020 • AEC-Q101 qualified • High temperature soldering guaranteed: 260°C/10 seconds • Halogen-free according to IEC 61249-2-21 definition 						
Primary characteristics		Applications						
$I_{F(AV)}$	1A	For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications						
V_{RRM}	20V to 60V							
I_{FSM}	30A							
I_{RM}	0.2/0.15mA							
V_{FM} at $I_F=1A$	0.5/0.7V							
T_J max.	150 °C							
		Mechanical data						
		<ul style="list-style-type: none"> • SMA • 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	SMA					Unit	
		SS12	SS13	SS14	SS15	SS16		
Max. repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	V	
Max. RMS reverse voltage	V_{RMS}	14	21	28	35	42	V	
Max. DC blocking voltage	V_{DC}	20	30	40	50	60	V	
Max. average forward current	$I_{F(AV)}$	1					A	
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	30					A	
Max. instantaneous forward voltage drop per diode	V_{FM}	0.5			0.7		V	
Max. instantaneous reverse current at rated DC blocking voltage	I_{RM}	Ta=25 °C		0.2			mA	
		Ta=125 °C		10				
Operating junction temperature	T_J	-55 ~ +150					°C	
Storage temperature	T_{STG}	-55 ~ +150					°C	
Typical thermal resistance (Note1)	$R_{\theta J-L}$	25					°C/W	
	$R_{\theta J-A}$	85						
	$R_{\theta J-C}$	46						

Notes:

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



Ordering information (Example)

PREFERRED	UNITWEIGHT(g)	PREFERREDPACKAGECODE	BASEQUANTITY	DELIVERYMODE
SS12				

Typical characteristics

(TA = 25°C unless otherwise noted)

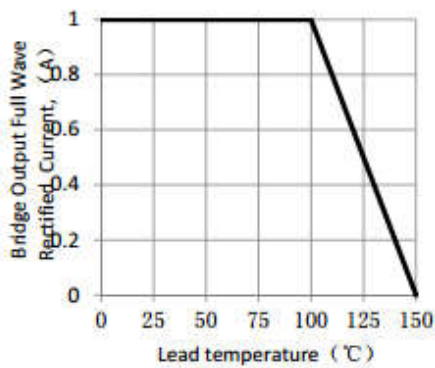


Figure 1. Forward Current Derating Curve

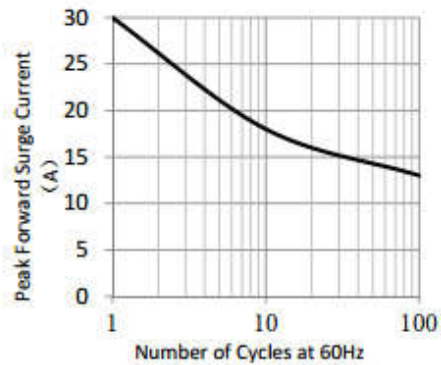


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

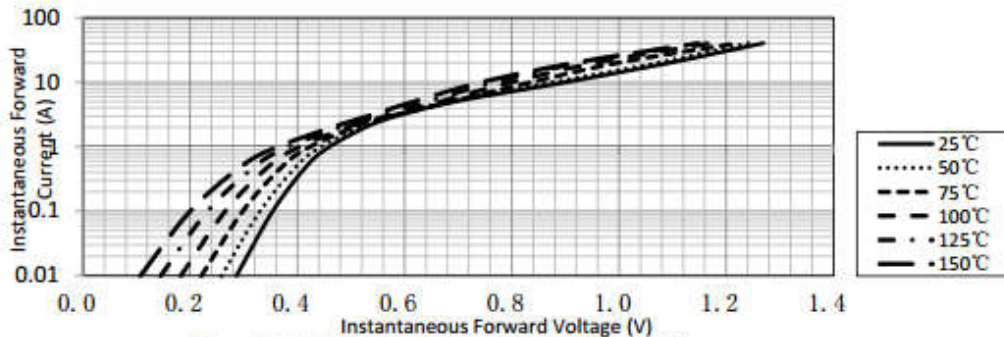


Figure 3. Typical Instantaneous Forward Characteristics (SK12 thru SK14)

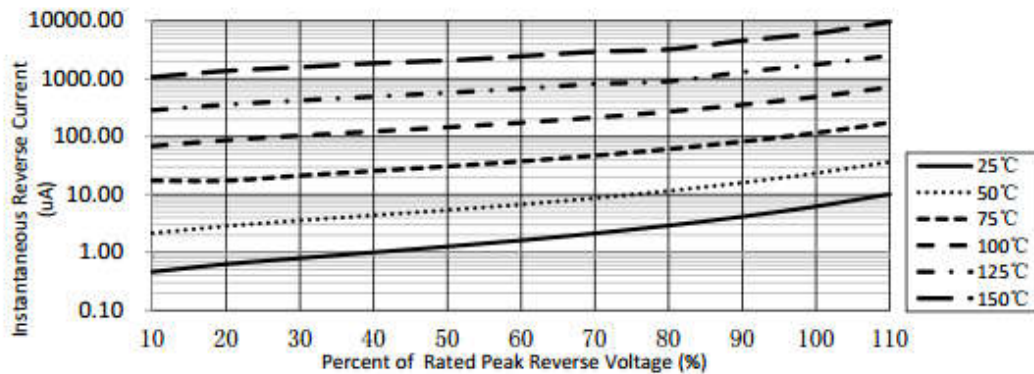


Figure 4. Typical Reverse Characteristics (SK12 thru SK14)



Typical characteristics

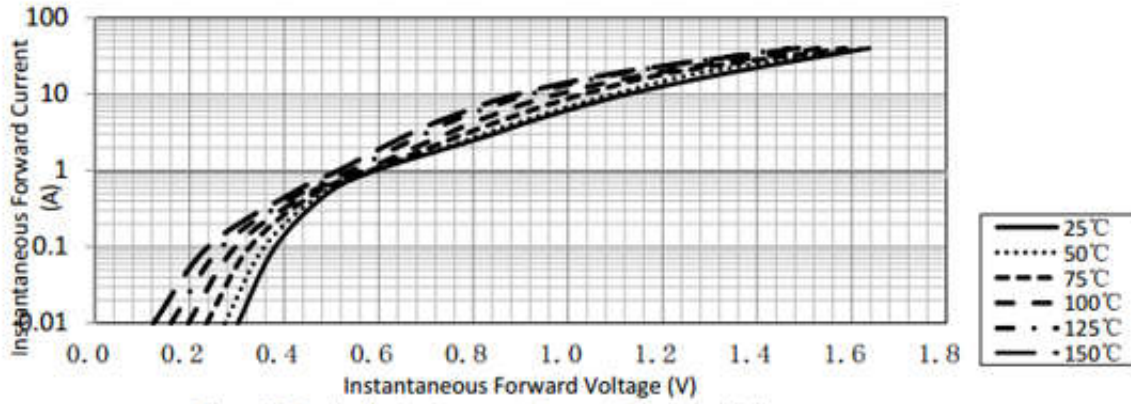


Figure 5. Typical Instantaneous Forward Characteristics

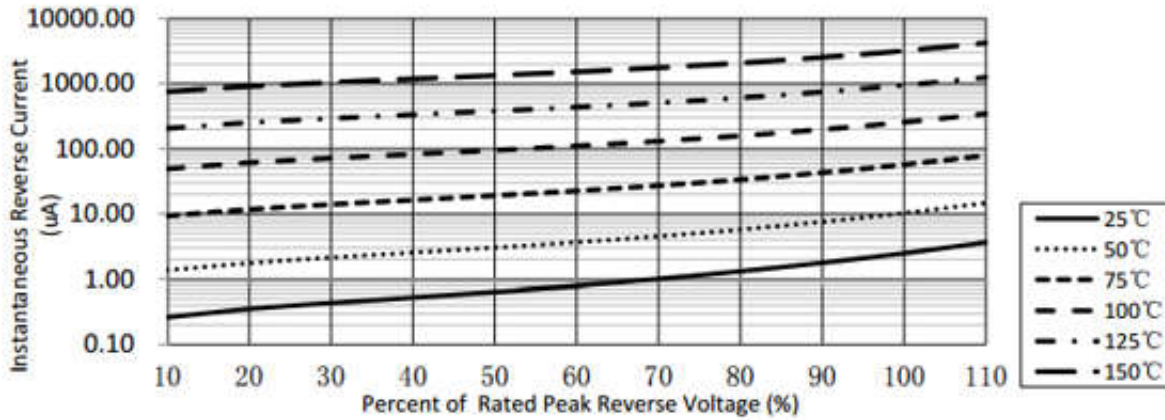
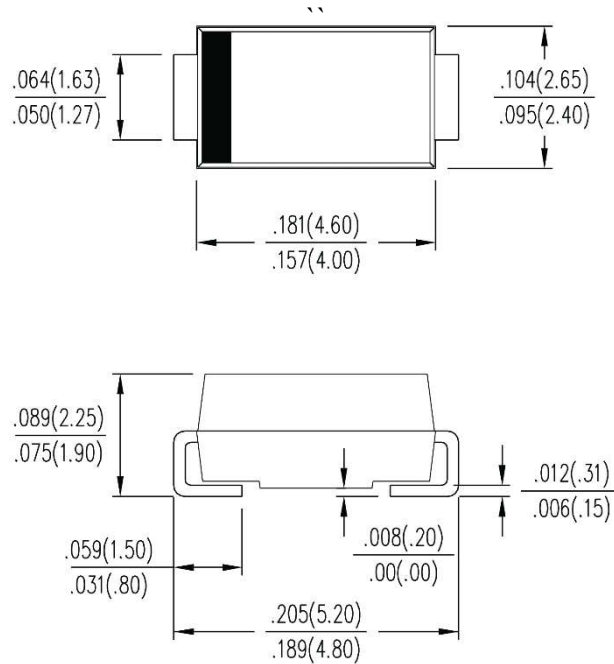


Figure 6. Typical Reverse Characteristics



Package outline dimensions



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