

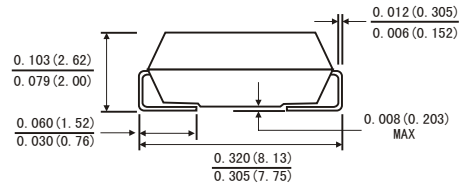
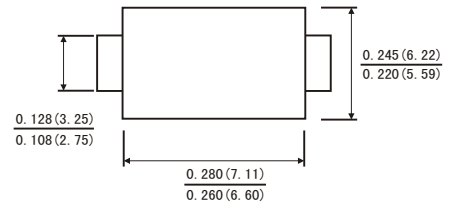


FEATURES

- Super fast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0



SMC-DO-214AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Molded Plastic
- Polarity: Color band denotes cathode
- Weight: 0.007 ounces, 0.21 grams
- Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave 60Hz.,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts	
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at $T_a=60^\circ\text{C}$	$I(AV)$	5.0							Amps	
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300.0							Amps	
Maximum Instantaneous Forward Voltage at 5.0 A	V_F	0.95							Volts	
Maximum Reverse current at rated DC Blocking Voltage	I_R	$T_a=25^\circ\text{C}$	20.0							μA
		$T_a=100^\circ\text{C}$	50.0							
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	18.0							$^\circ\text{C/W}$	
Typical Junction Capacitance (Note 1)	C_J	50.0							pF	
Operating and Storage temperature Range	T_J T_{STG}	-65 to+175							$^\circ\text{C}$	

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V

2. Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P. C. Board Mounted



FIG.1-FORWARD CURRENT DERATING CURVE

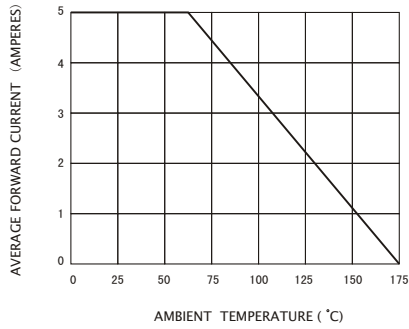


FIG.2-TYPICAL INSTANTANEOUS FORWARD VOLTAGE.(V)

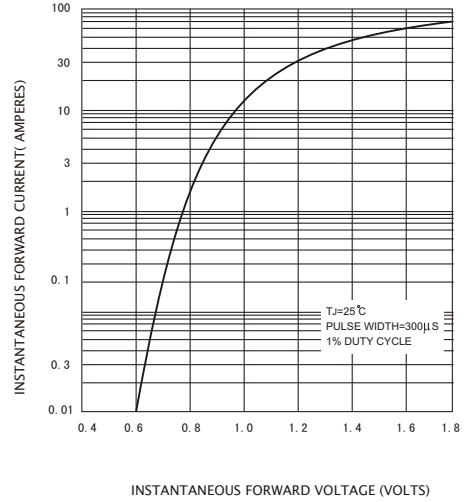


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

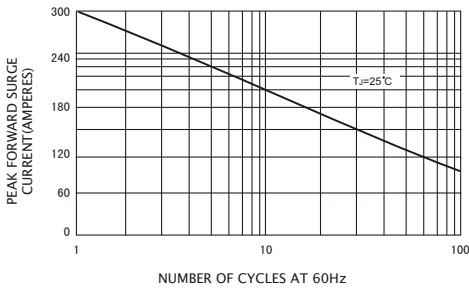


FIG.4-TYPICAL REVERSE CHARACTERISTICS

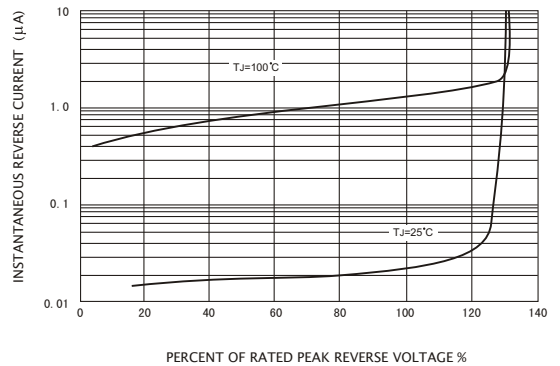


FIG.5-TYPICAL JUNCTION CAPACITANCE

