

Features

- The plastic package carries UL Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

Mechanical Characteristics

- Case: SMC(DO-214AB) package molded plastic body over passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Electrical Parameters

PARAMETER	SYMBOL	ES5AC	ES5BC	ES5CC	ES5DC	ES5EC	ES5GC	ES5JC	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{AV}	5							A
Peak forward surge current	I_{FSM}	150							A
Maximum instantaneous forward voltage at 5A	V_F	0.95					1.3	1.7	V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25\text{ }^{\circ}\text{C}$	I_R							5 uA
	$T_A=100\text{ }^{\circ}\text{C}$	I_{RT}							100 uA
Maximum reverse recovery time (NOTE 1)	t_{rr}	35							ns
Typical junction capacitance (NOTE 2)	C_J	75							pF
Typical Thermal Resistance Junction to Ambient (NOTE3)	$R_{\theta JA}$	55							$^{\circ}\text{C/W}$
Typical Thermal Resistance Junction to Lead (NOTE3)	$R_{\theta JL}$	15							$^{\circ}\text{C/W}$
Operating Temperature Range	T_J	-55 to 150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150							$^{\circ}\text{C}$

Note1: Reverse recovery condition $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

Note2: Measured at 1MHz and applied reverse voltage of 4.0V DC.

Note3: PCB. mounted with 16×16mm copper pad areas

Rating And Characteristic Curves (TA=25°C unless otherwise noted)

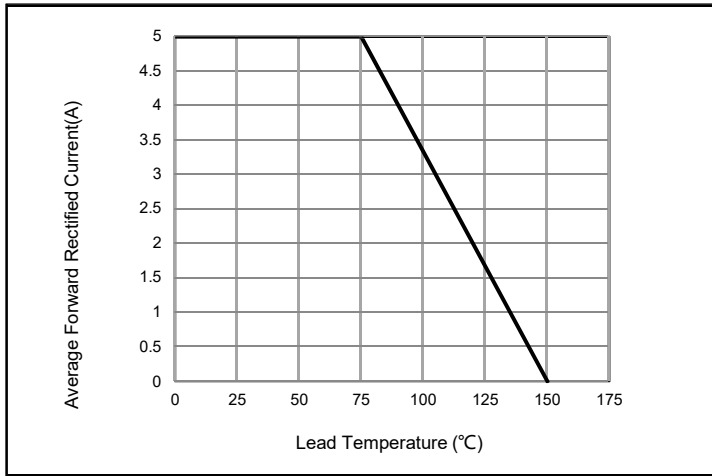


Fig. 1 - Forward Current Derating Curve

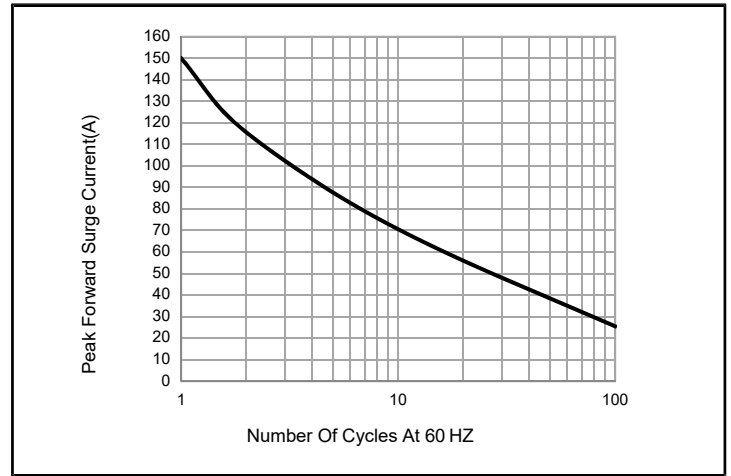


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

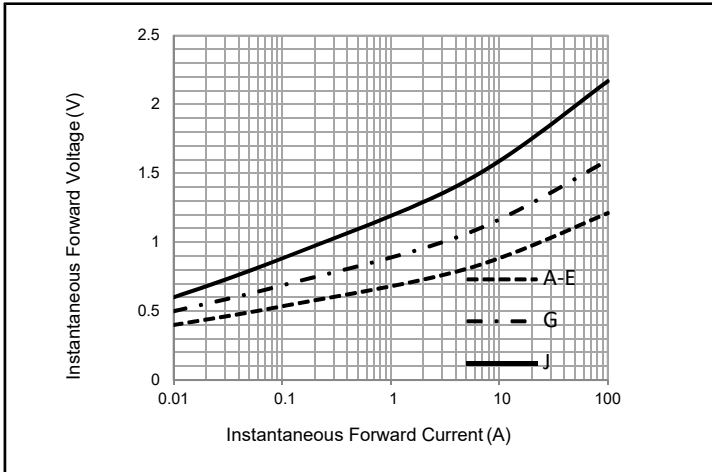


Fig. 3 - Typical Instantaneous Forward Characteristics

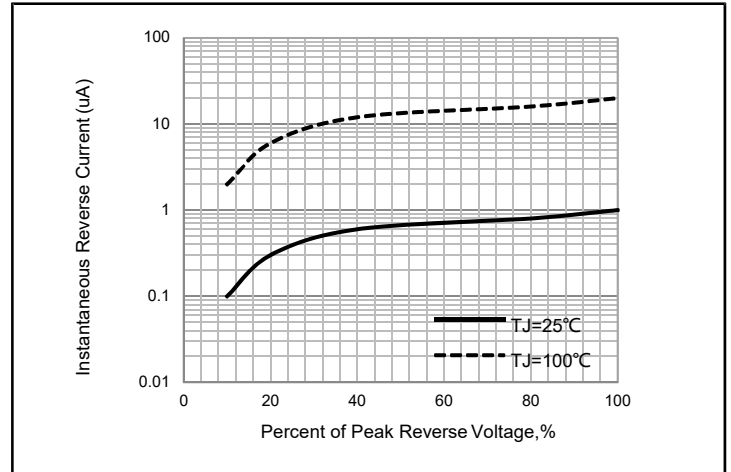


Fig. 4 - Typical Reverse Characteristics

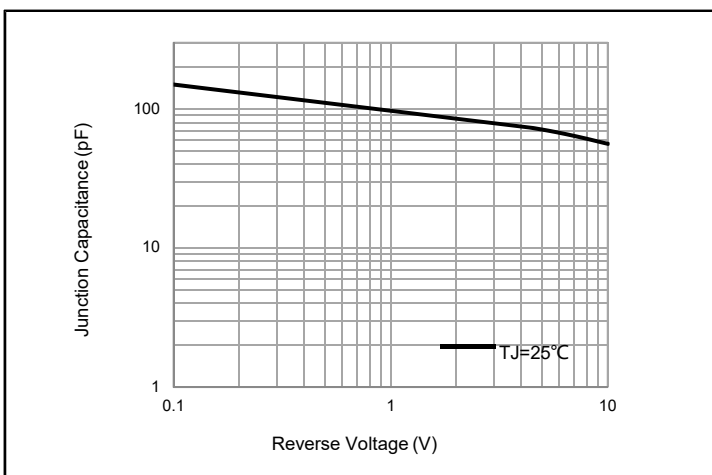


Fig. 5 - Typical Junction Capacitance

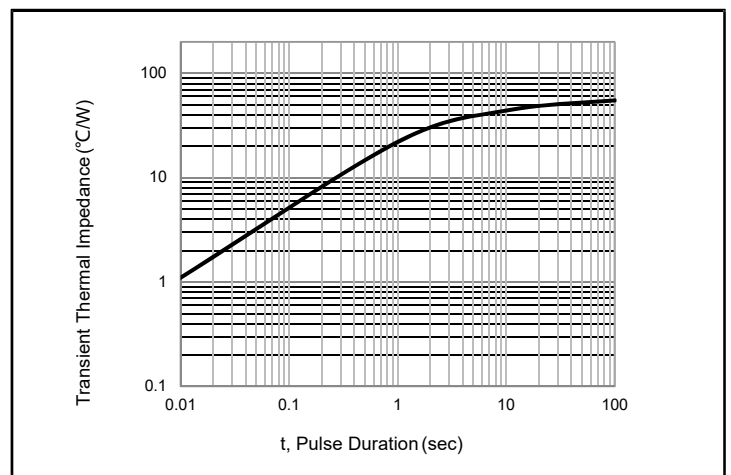
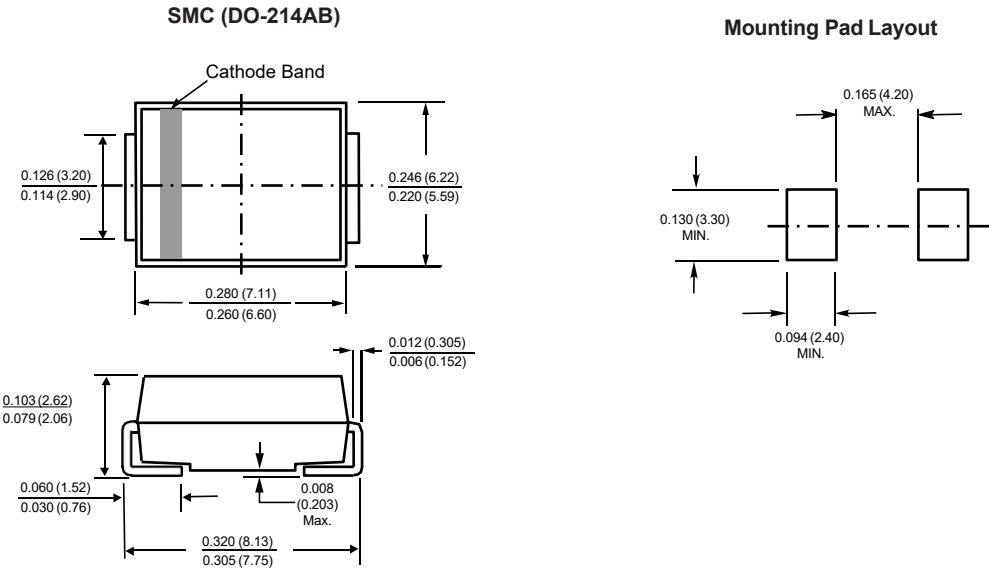


Fig. 6 - Typical Transient Thermal Impedance

Package Outline Dimensions in inches (millimeters)



Part Marking System



PDW:Company Logo
XX:Marking Code

Summary of Packing Options

Package	Packing Description	Packing Quantity
SMC	Tape/Reel, 13" reel	3000