DESCRIPTION

The S3ACG~S3MCG are available in SMC Package

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Available in SMC Package

ORDERING INFORMATION

Package Type	Part Number
SMC	S3ACG
	S3BCG
	S3DCG
	S3GCG
	S3JCG
	S3KCG
	S3MCG
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

MECHANICAL DATA

Case: SMC

Terminals: Solderable per MIL-STD-750,
Method 2026

Approx. Weight: 0.22g / 0.0077oz

PIN DESCRIPTION

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter		Symbol	S3ACG	S3BCG	S3DCG	S3GCG	S3JCG	S3KCG	S3MCG	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load		I_{FSM}	90							A
Maximum Instantaneous Forward Voltage at 3A		V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25°C T_A=125°C	I_R	5.0 100							μA
Typical junction capacitance NOTE1		C_J	40							pF
Typical thermal resistance NOTE2		$R_{\theta JA}$ $R_{\theta JC}$	40 16							℃/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 to 150							℃

NOTE1: Measured at 1 MHz and applied reverse voltage of 4 V DC
NOTE2: P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

TYPICAL CHARACTERISTICS

Figure 1. Forward Current Derating Curve

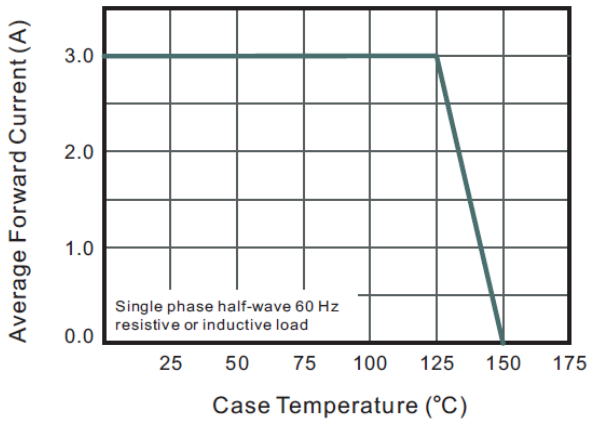


Figure 2. Typical Reverse Characteristics

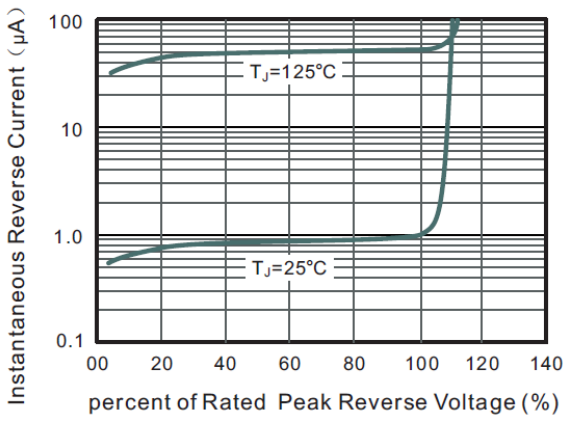


Figure 3. Typical Forward Characteristic

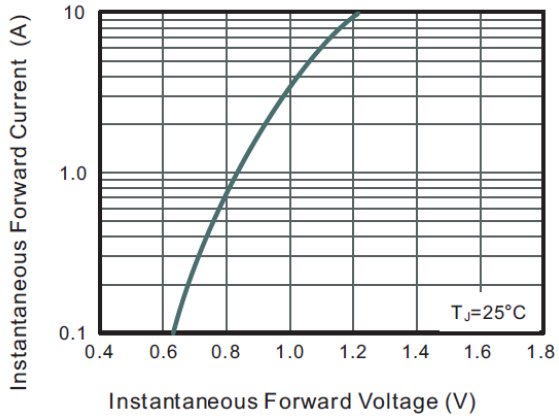


Figure 4. Typical Junction Capacitance

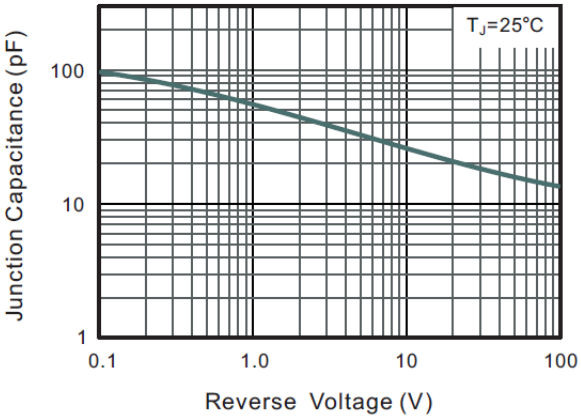
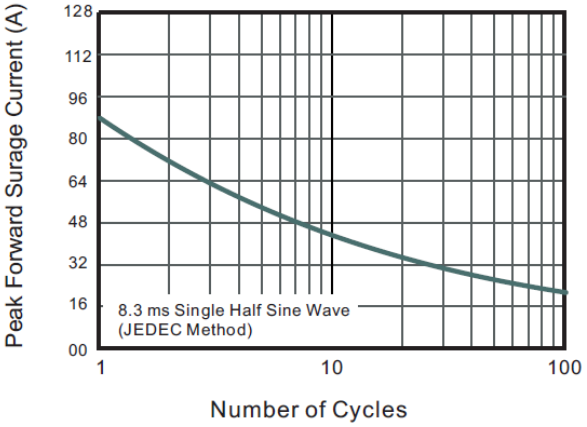


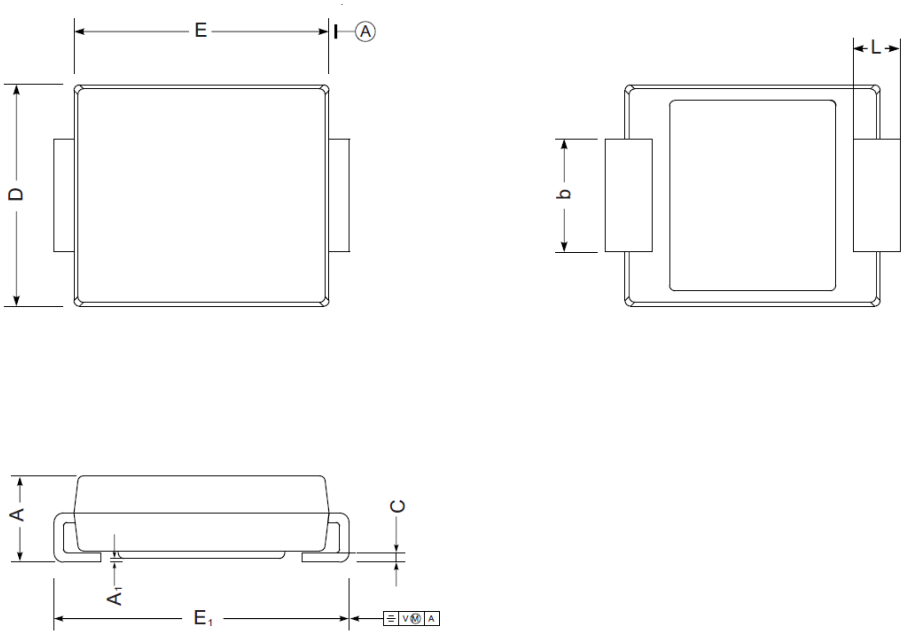
Figure 5. Maximum Non-Repetitive Peak Forward Surge Current



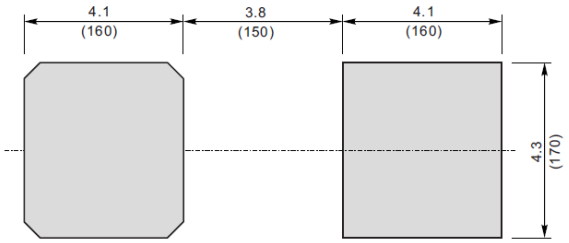
PACKAGE INFORMATION

Dimension in SMC Package (Unit: mm/mil)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



Unit : mm / (mil)

UNIT		A	E	D	E_1	A_1	C	L	b
mm	MAX	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	MIN	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	MAX	103	276	244	315	8.3	12	63	128
	MIN	79	256	220	299	2.0	5.9	35	108

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