DESCRIPTION

The GS1A~GS1M are available in SMA package.

ORDERING INFORMATION

Package Type	Part Number
SMA	GS1A
	GS1B
	GS1D
	GS1G
	GS1J
	GS1K
	GS1M
Note	SPQ: 2,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURES

- The plastic package carries Underwriters Laboratory 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:
- 250°C /10 seconds at terminals
- Glass passivated chip junction
- Available in SMA package

MECHANICAL DATA

Case: JEDEC DO-214AC 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

Weight : 0.002ounce, 0.07grams

ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	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 at T_L=110°C	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							V
Maximum DC reverse current T_A = 25°C at rated DC blocking voltage T_A = 100°C	I_R	5.0 50.0							μA
Typical junction capacitance NOTE1	C_J	15.0							pF
Typical thermal resistance NOTE2	$R_{\theta JA}$	75.0							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-50 ~ +150							°C

NOTE1: Measured at 1MHz and applied reverse voltage of 4.0V D.C.
NOTE2: P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

TYPICAL CHARACTERISTICS

T_A = 25°C unless otherwise specified.

Figure 1. Forward Current Derating Curve

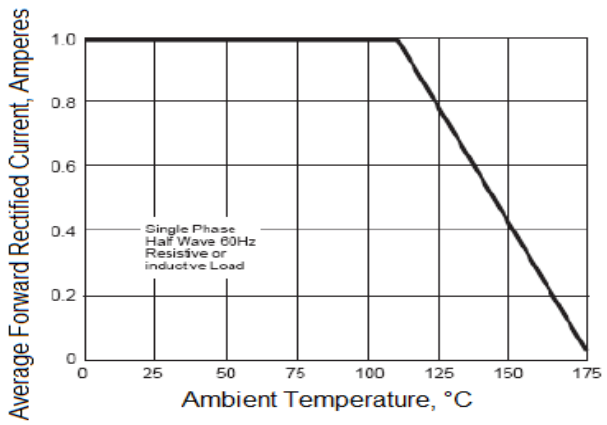


Figure 2. Maximum Non-Repetitive Peak Forward

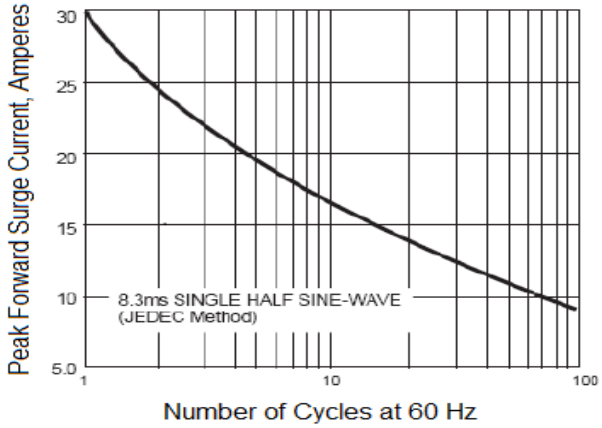


Figure 3. Typical Instantaneous Forward Characteristics

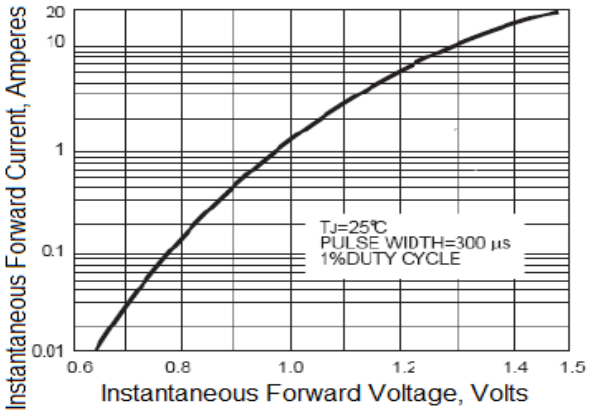


Figure 4. Typical Reverse Characteristics

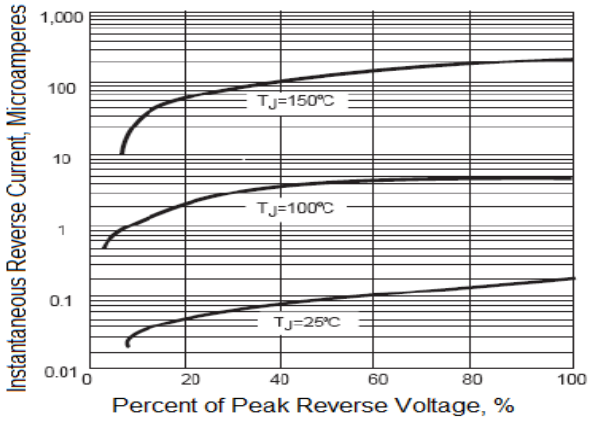


Figure 5. Typical Junction Capacitance

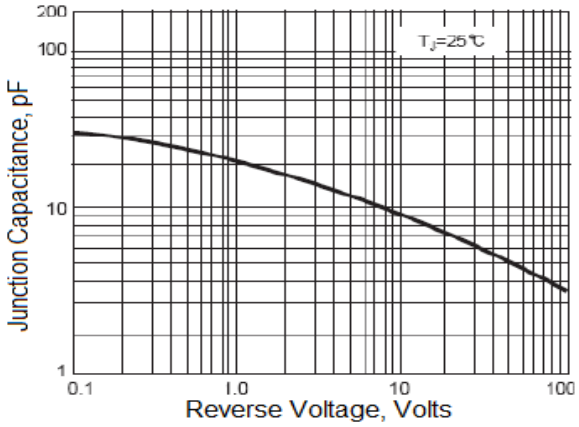
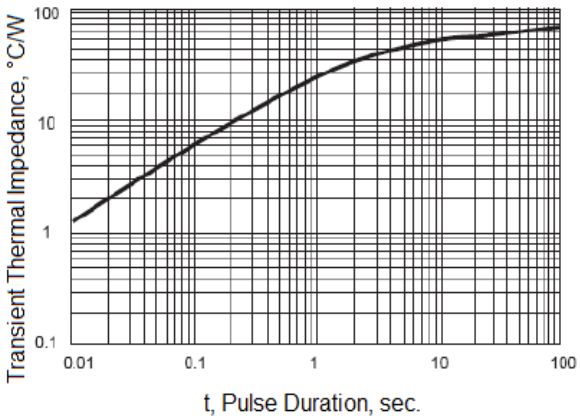
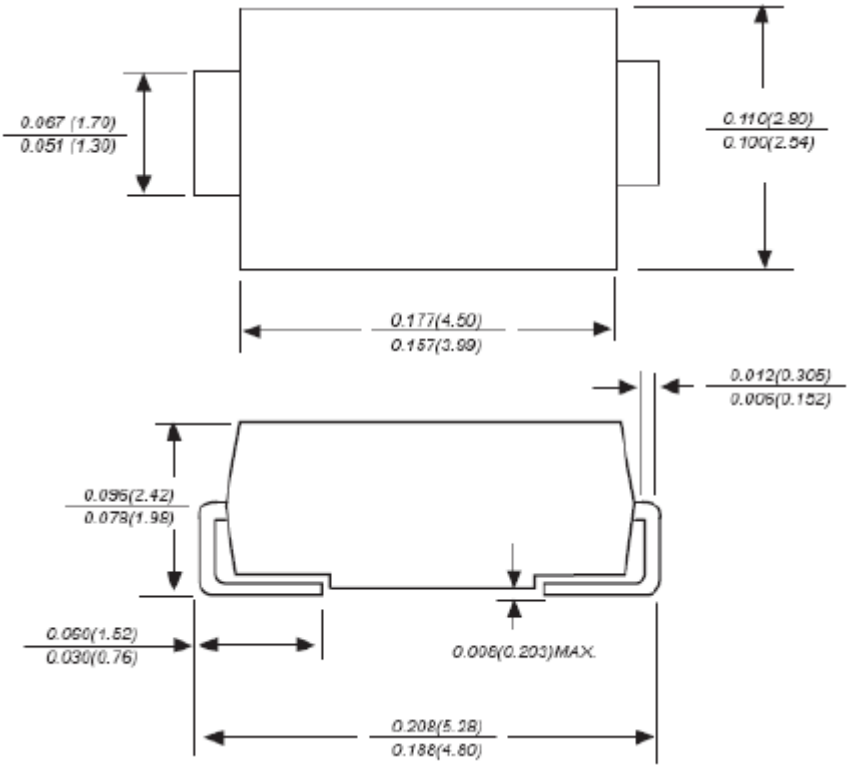


Figure 6. Typical Transient Thermal Impedance



PACKAGE INFORMATION

Dimension in SMA Package (Unit: mm)



IMPORTANT NOTICE

AiT Semiconductor Inc. (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Semiconductor Inc.'s integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or servere property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Semiconductor Inc. assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.