Suntan_® Su_®

GS1A THRU GS1M

SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

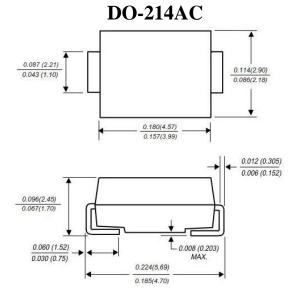
FEATURES

- ◆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

Mechanical Data

- ◆Case: JEDEC DO-214AC molded plastic body
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ♦ Polarity: Color band denotes cathode end
- ♦ Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	UNIT
	STMBOL	UDIA	GDID	GDID	0510	0515	USIK	ODIM	UNII
Maximum Repetitive 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 at T_L =55°C	I(AV)	1.0							Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC	Ifsm	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.1							Volts
Maximum DC Reverse Current $T_A = 25 ^{\circ}C$ at Rated DC blocking voltage $T_A = 100 ^{\circ}C$	Ir	5.0 50.0							uA
Typical Junction Capacitance (Note 1)	C _J	15.0							pF
Typical Thermal Resistance (Note 2)	Røja	75.0							°C/W
Operating junction and storage temperature range	T _J ,Tstg	-65 to +175							°C

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

2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

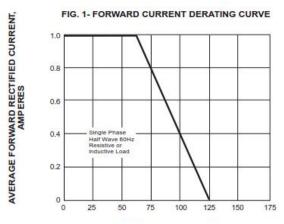
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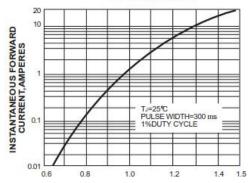
Forward Current - 1.0 Ampere Reverse Voltage - 50 to 1000 Volts

RATING AND CHARACTERISTIC CURVES GS1A THRU GS1M

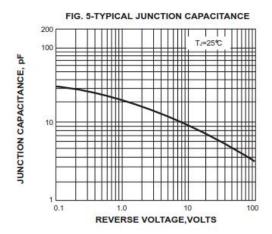


AMBIENT TEMPERATURE,°C





INSTANTANEOUS FORWARD VOLEAGE, VOLTS



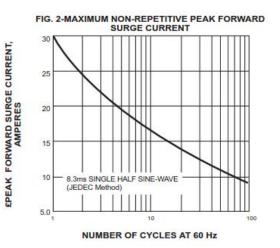
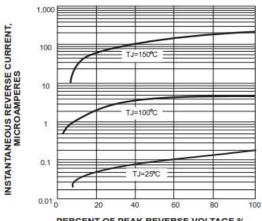
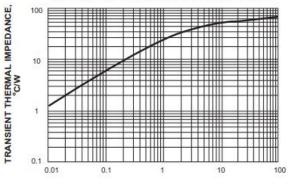


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE,%

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t, PULSE DURATION, sec.

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.