



GS1M

DIODE

SURFACE MOUNT GENERAL RECTIFIER

DESCRIPTION

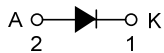
The UTC **GS1M** is a surface mount general rectifier, it uses UTC's advanced technology to provide customers with high forward surge current and low reverse leakage, etc.

The UTC **GS1M** is suitable for surface mounted applications.

FEATURES

- * Low reverse leakage
- * High forward surge current capability

SYMBOL



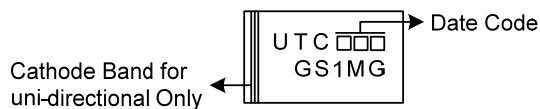
ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
GS1MG-SMAF-R	SMAF	K	A	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

GS1MG-SMAF-R (1) Packing Type (2) Package Type (3) Green Package	(1) R: Tape Reel (2) SMAF: SMAF (3) G: Halogen Free and Lead Free
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MARKING



■ ABSOLUTE MAXIMUM RATINGS

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	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
RMS Voltage	V_{RMS}	700	V
DC Blocking Voltage	V_{DC}	1000	V
Average Forward Rectified Current at $T_L=110^{\circ}\text{C}$	I_O	1.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30.0	A
Junction Temperature	T_J	-65~+175	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65~+175	$^{\circ}\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 2)	θ_{JA}	75	$^{\circ}\text{C}/\text{W}$

■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

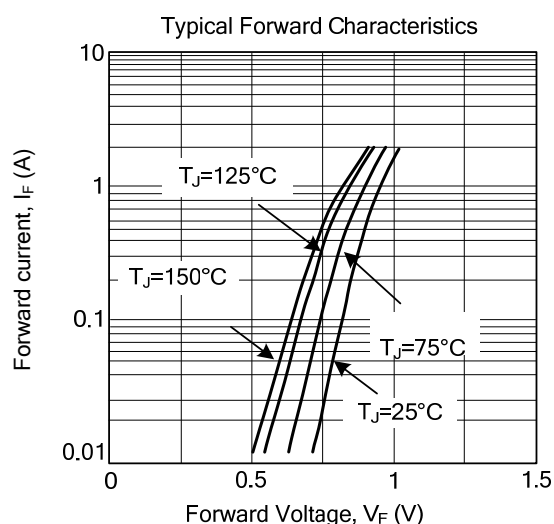
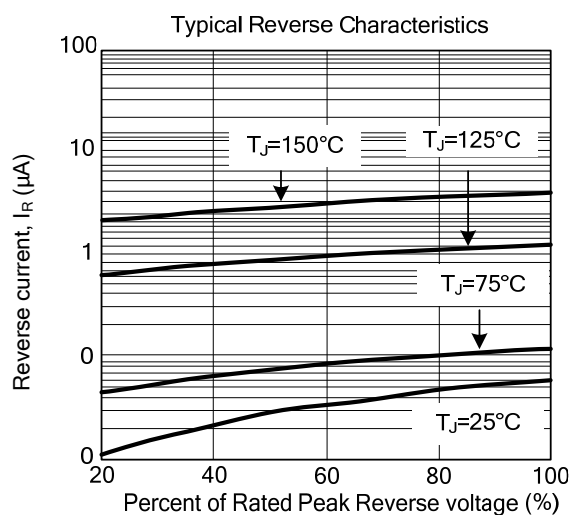
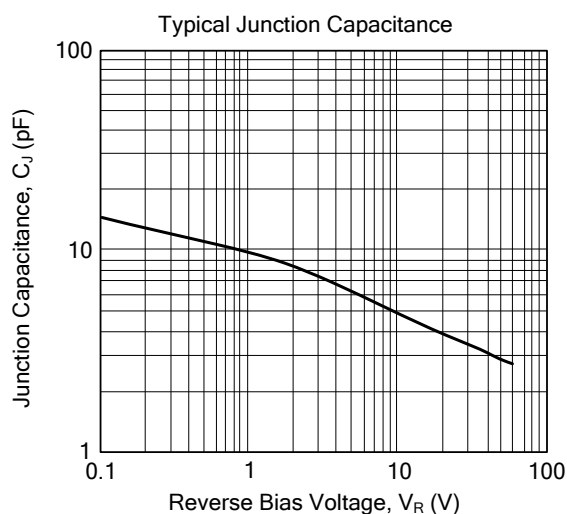
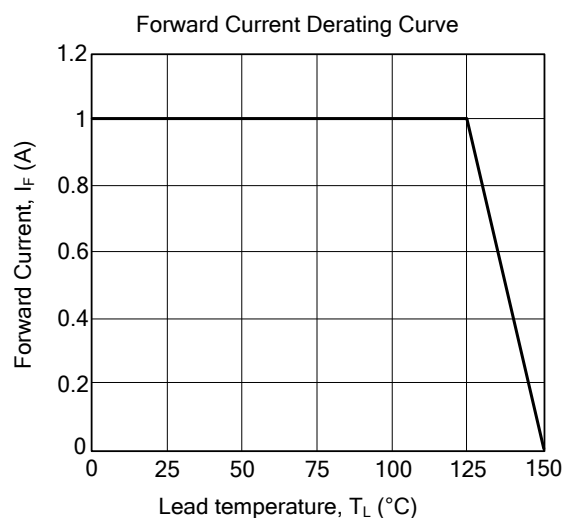
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V_F	$I_F=1.0\text{A}$			1.1	V
DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^{\circ}\text{C}$			5.0	μA
		$T_A=100^{\circ}\text{C}$			50.0	μA
Junction Capacitance (Note 1)	C_J			15.0		pF

Notes: 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.

■ TYPICAL CHARACTERISTICS



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