

GT1MMA

Surface General Purpose Rectifier

Voltage

1000 V

Current

1 A

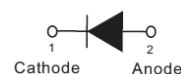
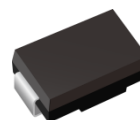
Features

- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: SMA Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0024 ounces, 0.068 grams

SMA



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1000	V
Maximum Rms Voltage	V _{RMS}	700	V
Maximum Dc Blocking Voltage	V _{DC}	1000	V
Maximum Average Forward Current	I _{F(AV)}	1	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	35	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V _R = 4 V	C _J	8	pF
Typical Thermal Resistance	R _{θJA} ⁽¹⁾	150	°C/W
	R _{θJC} ⁽²⁾	20	
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C

GT1MMA

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 0.5\text{ A}, T_J = 25^\circ\text{C}$	-	0.88	-	V
		$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	-	1.1	
		$I_F = 0.5\text{ A}, T_J = 125^\circ\text{C}$	-	0.77	-	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.83	-	
Reverse Current	I_R	$V_R = 800\text{ V}, T_J = 25^\circ\text{C}$	-	0.05	-	μA
		$V_R = 1000\text{ V}, T_J = 25^\circ\text{C}$	-	-	1	
		$V_R = 1000\text{ V}, T_J = 125^\circ\text{C}$	-	6	-	
Reverse Recovery Time	T_{RR}	$I_F = 0.5\text{ A}, I_R = 1\text{ A},$ $I_{RR} = 0.25\text{ A}, T_J = 25^\circ\text{C}$	1000	-	2000	ns

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.

GT1MMA

TYPICAL CHARACTERISTIC CURVES

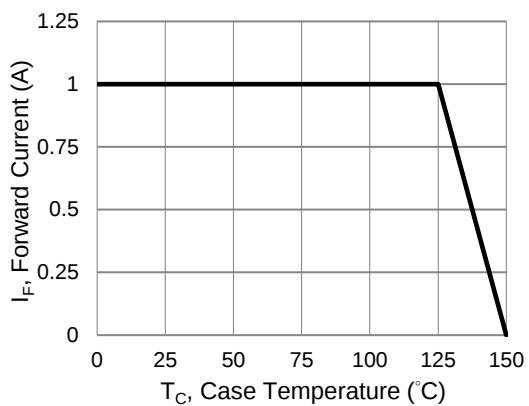


Fig.1 Forward Current Derating Curve

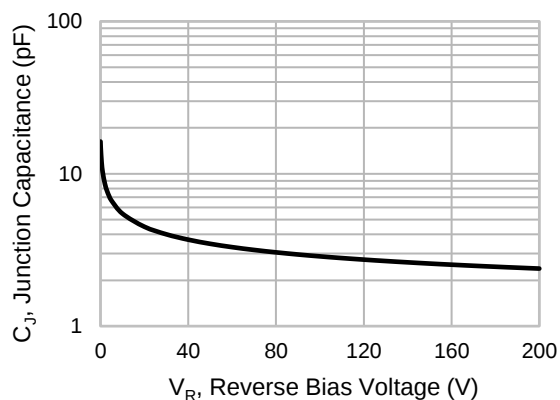


Fig.2 Typical Junction Capacitance

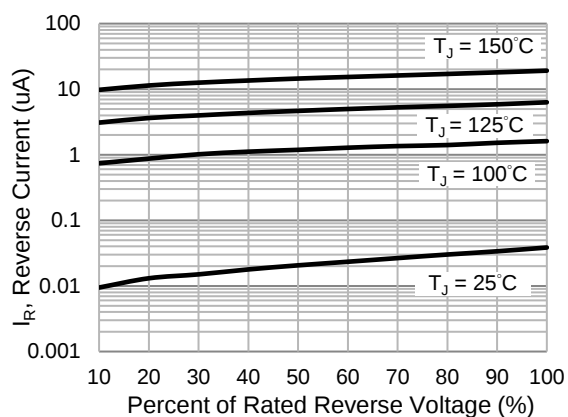


Fig.3 Typical Reverse Characteristics

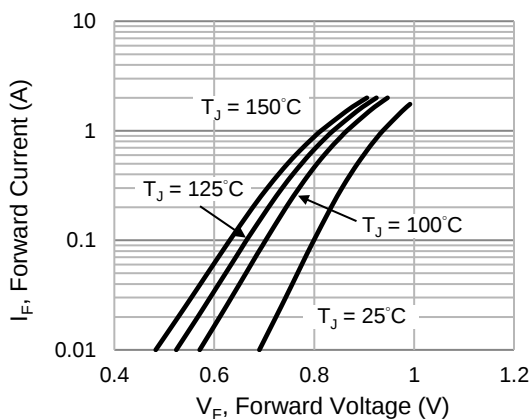


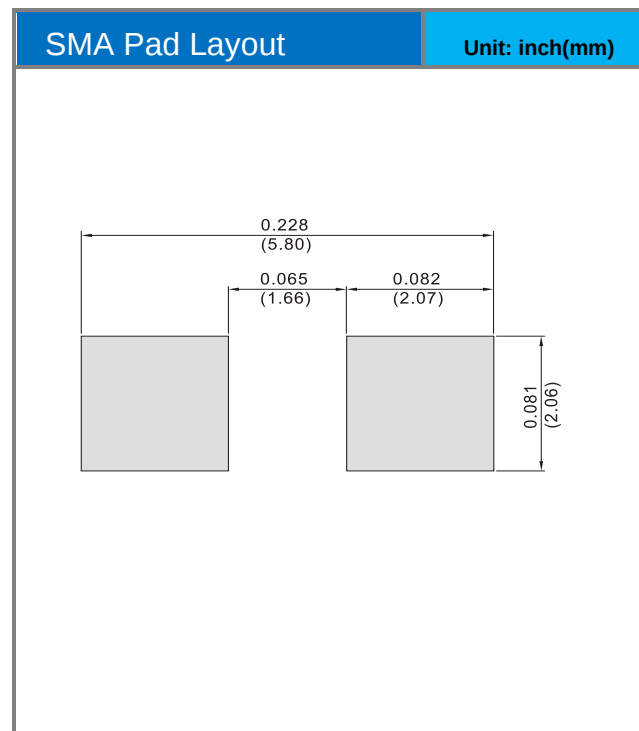
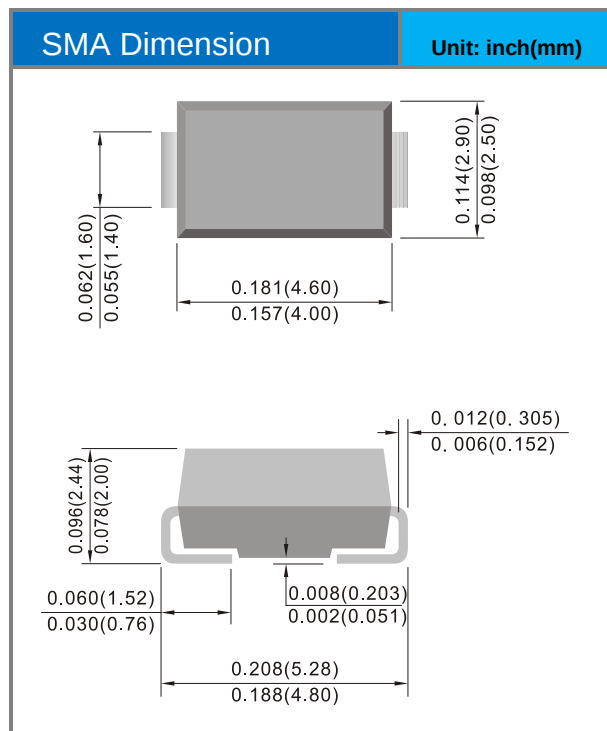
Fig.4 Typical Forward Characteristics

GT1MMA

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
GT1MMA	SMA	1.8K pcs / 7" reel	GT1MA

Packaging Information & Mounting Pad Layout



GT1MMA

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from PANJIT International Inc..
- PANJIT International Inc. reserves the rights to make changes of the content herein the document follow PCN procedure. Please refer to our website for the latest document.
- PANJIT International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- PANJIT International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. PANJIT International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed or authorized for equipment relating to human life, life-saving or life-sustaining applications, such as medical instruments, transportation equipment, aerospace machinery, or for other applications intended to cause personal injury. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify PANJIT International Inc. for any damages resulting from such improper use or sale. For additional terms and conditions regarding the use of PANJIT products, please refer to the Terms of Use available on the PANJIT website.
- Since PANJIT uses lot number as the tracking base, please provide the lot number for tracking when complaining.