

1.0 Amp. Glass Passivated Junction Rectifier

A-405 	Voltage 200V to 1000 V	Current 1.0 A at 50° C	
	FEATURES • Glass passivated chip junction • High reliability • Cavity-free glass-passivated junction • Low forward voltage drop • Low leakage current, typical I_R less than 0.1 μA • High forward surge capability • Solder dip 260°C, 10s • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC		  RoHS COMPLIANT
	MECHANICAL DATA • Case: A-405. Epoxy meets UL 94V-0 flammability rating. • Polarity: Color band denotes cathode end • Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.		
	TYPICAL APPLICATIONS Used in general purpose rectification of power supplies, inverters, converters and freewheeling diodes application		

Maximun Ratings and Electrical Characteristics at 25°C

		1N 4003SGP	1N 4004SGP	1N 4005SGP	1N 4006SGP	1N 4007SGP
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Maximum Average Forward Rectified Current 9.5mm Lead Length @ $T_a = 50^\circ\text{C}$	1.0 A				
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	30 A				
C_j	Typical Junction Capacitance at 1 MHz and reverse voltage of 4V _{DC}	10 pF				
T_j	Operating Temperature Range	-65 to +150 °C				
T_{stg}	Storage Temperature Range	-65 to +150 °C				

Electrical Characteristics at Tamb = 25 °C

V_F	Maximum Instantaneous Forward Voltage @ = 1.0 A	1.0 V
I_R	Maximum DC Reverse Current @ $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_a = 125^\circ\text{C}$	5 μ A 100 μ A
$R_{th(j-a)}$	Typical Thermal Resistance (See note)	80 °C/W

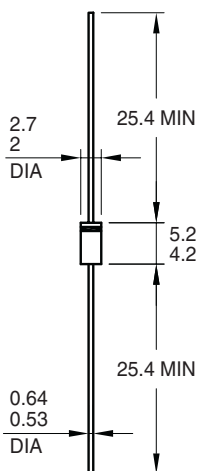
NOTE: Mount on Cu-Pad size 5mm x 5mm on PCB.

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Ordering information

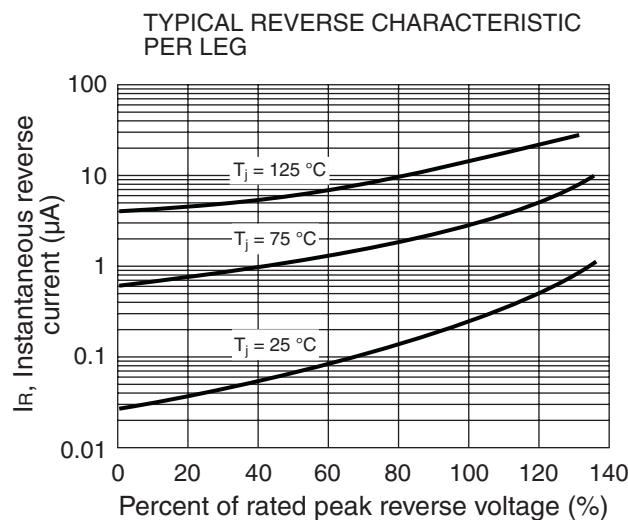
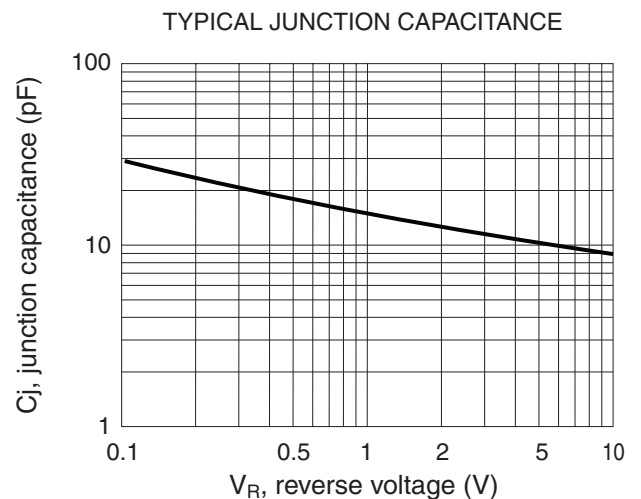
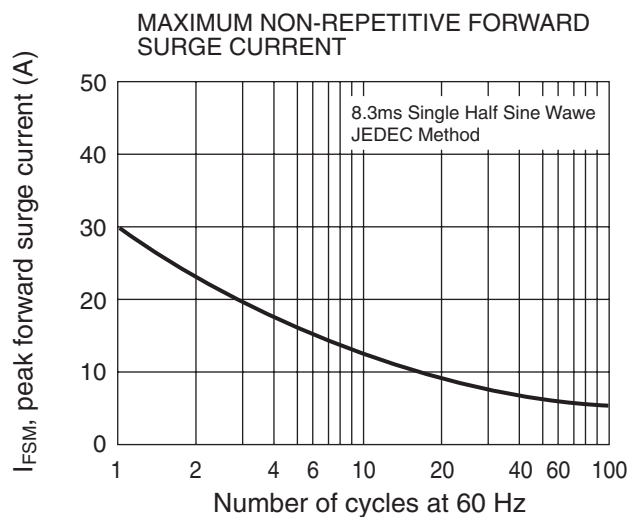
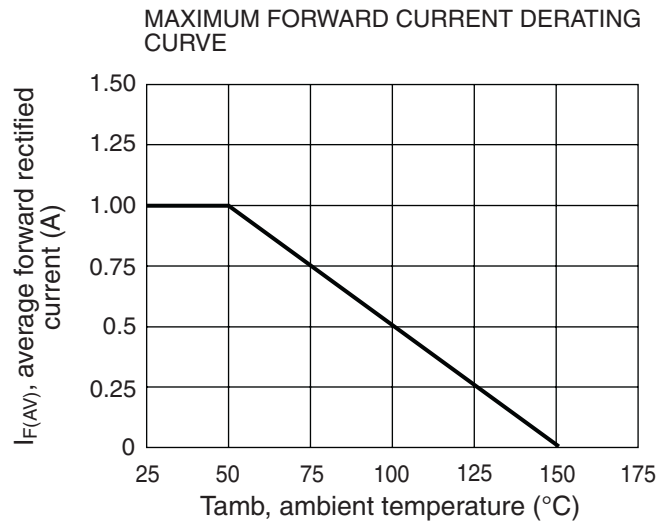
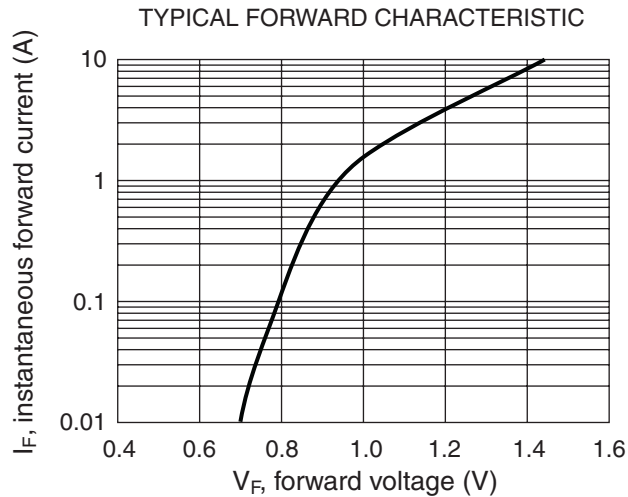
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
1N4005SGP AMP	AMP	AMMO BOX	3,000	0.22
1N4005SGP TR	TR	13" diameter tape and reel	5,000	0.22

Package Outline Dimensions: (mm) A-405



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Ratings and Characteristics (Ta 25 °C unless otherwise noted)



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Disclaimer

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