

- High surge current capability
- Low power loss
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



A-405

MECHANICAL DATA

Case: A-405

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Weight: 0.2g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	1N 4001S	1N 4002S	1N 4003S	1N 4004S	1N 4005S	1N 4006S
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800
Maximum average forward rectified current	I _{F(AV)}	1					
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30					
Maximum instantaneous forward voltage (Note 1) @ 1 A	V _F	1.0					
Maximum reverse current @ rated VR	I _R	T _J =25 °C					
		T _J =125 °C					
Typical junction capacitance (Note 2)	C _j	15					
Typical thermal resistance	R _{θJA}	50					
Operating junction temperature range	T _J	- 55 to +150					
Storage temperature range	T _{STG}	- 55 to +150					

Note 1: Pulse test with PW=300 μs, 1% duty cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Document Number: DS_D1402005



(Note 1)	A0	Sulix G	A-405	3K / AMMO box
	R0		A-405	5K / 13" Reel
	B0		A-405	1K / Bulk packing

Note 1: "x" defines voltage from 50V (1N4001S) to 1000V (1N4007S)

EXAMPLE

PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
1N4007S A0	1N4007S	A0		
1N4007S A0G	1N4007S	A0	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

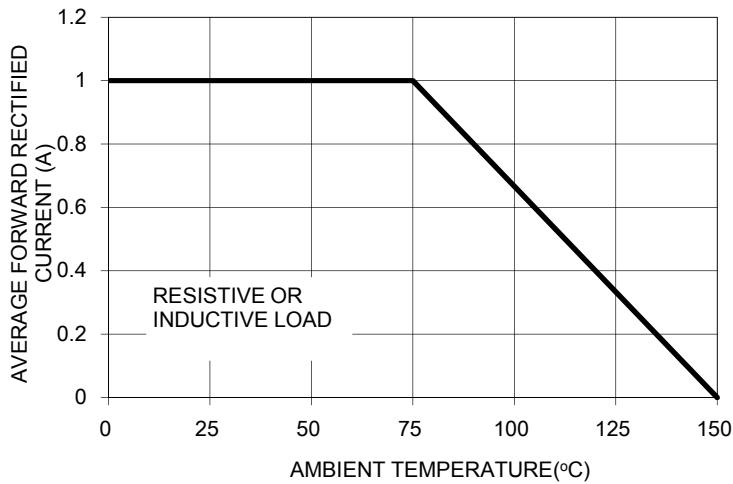


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

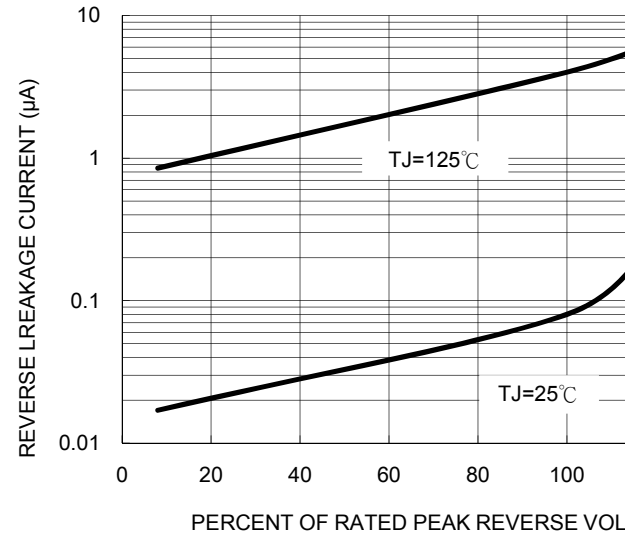


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

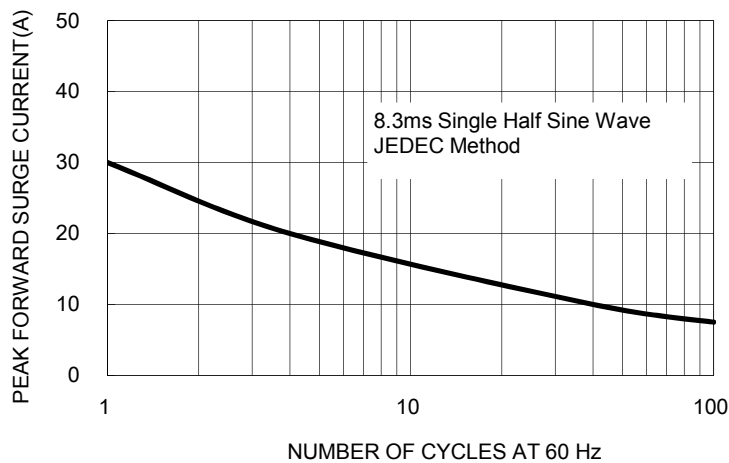
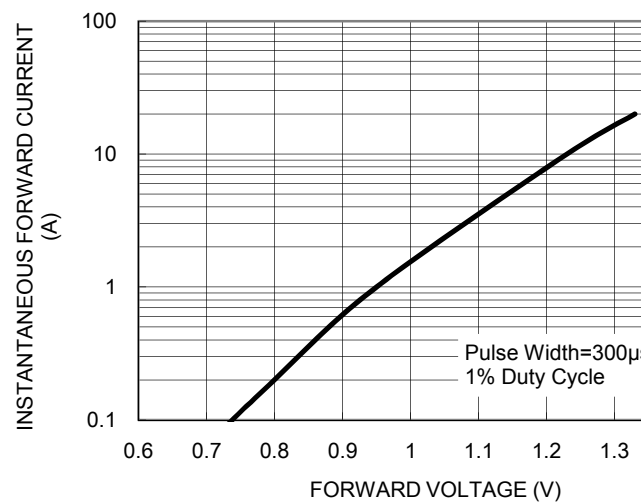
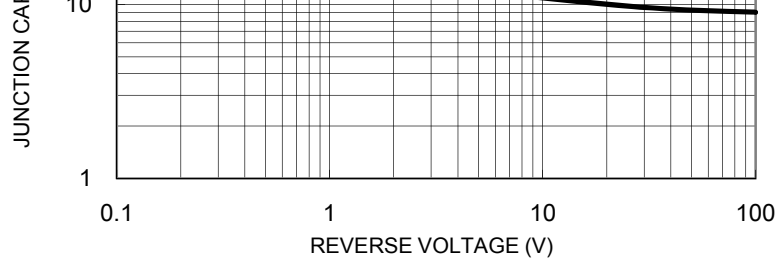
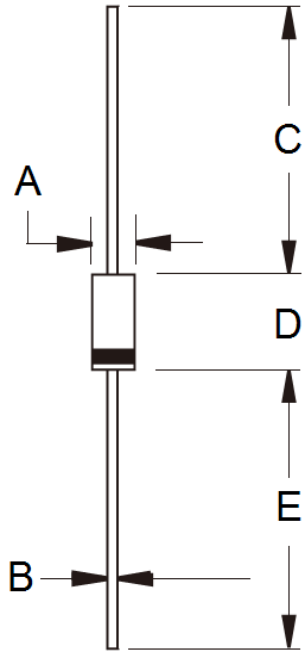


FIG. 4- TYPICAL FORWARD CHARACTERISTICS



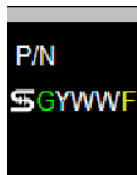


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.00	2.70	0.079	0.106
B	0.53	0.64	0.021	0.025
C	25.40	-	1.000	-
D	4.20	5.20	0.165	0.205
E	25.40	-	1.000	-

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code

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Document Number: DS_D1401031

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