

## ■ FEATURES

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

## ■ TYPICAL APPLICATIONS

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

## ■ MECHANICAL DATA

- **Package:** DO-201AD(DO-27)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

## ■ MAXIMUM RATINGS (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N5400G	1N5401G	1N5402G	1N5404G	1N5406G	1N5407G	1N5408G
Device marking code			1N5400G	1N5401G	1N5402G	1N5404G	1N5406G	1N5407G	1N5408G
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V <sub>RMS</sub>	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V <sub>DC</sub>	V	50	100	200	400	600	800	1000
Average Forward Current @60Hz sine wave, Resistance load, Ta =70°C	I <sub>F(AV)</sub>	A	3.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	I <sub>FSM</sub>	A	200						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			400						
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	166						
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C <sub>j</sub>	pF	40						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~ +150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~ +150						

## ■ ELECTRICAL CHARACTERISTICS (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	1N5400G	1N5401G	1N5402G	1N5404G	1N5406G	1N5407G	1N5408G
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>F</sub> =3.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C	2.5						
			T <sub>j</sub> =125°C	100						

■ **THERMAL CHARACTERISTICS** ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N5400G	1N5401G	1N5402G	1N5404G	1N5406G	1N5407G	1N5408G
Typical Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	30						

■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1N5400G~1N5408G	D1	Approximate 1.05	1250	1250	12500	Tape
1N5400G~1N5408G	C1	Approximate 1.05	250	250	12500	Bulk

■ **CHARACTERISTICS (TYPICAL)**

FIG.1:  $I_o$ - $T_a$  Curve

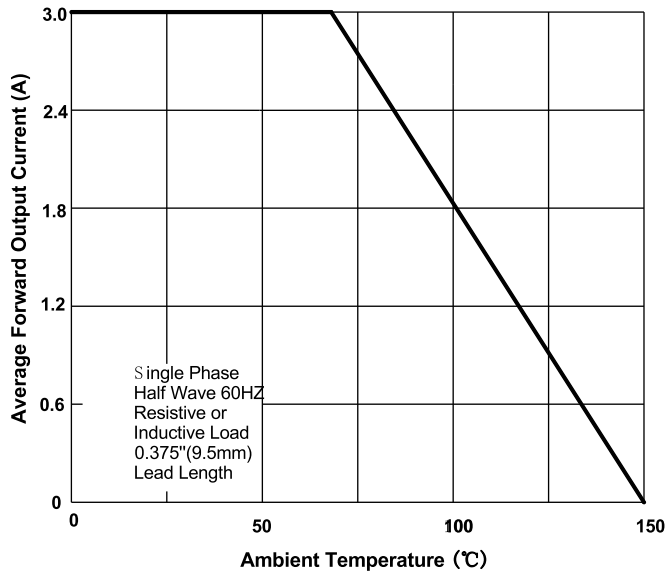


FIG.2: Forward Surge Current Capability

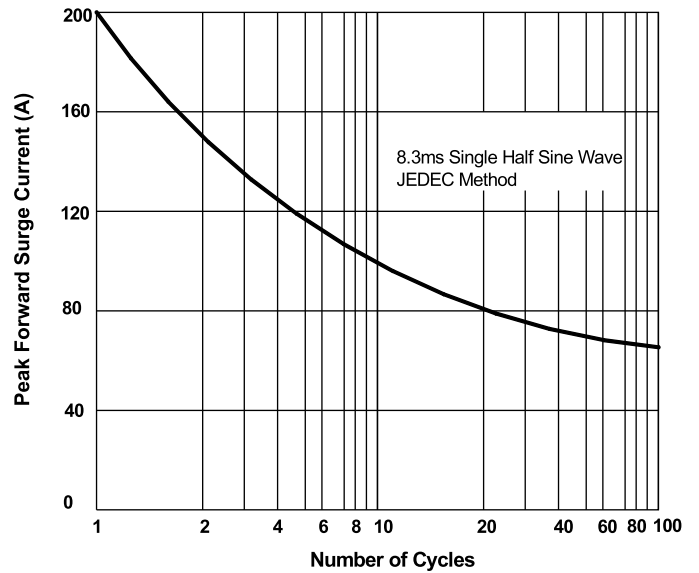


FIG.3: Forward Voltage

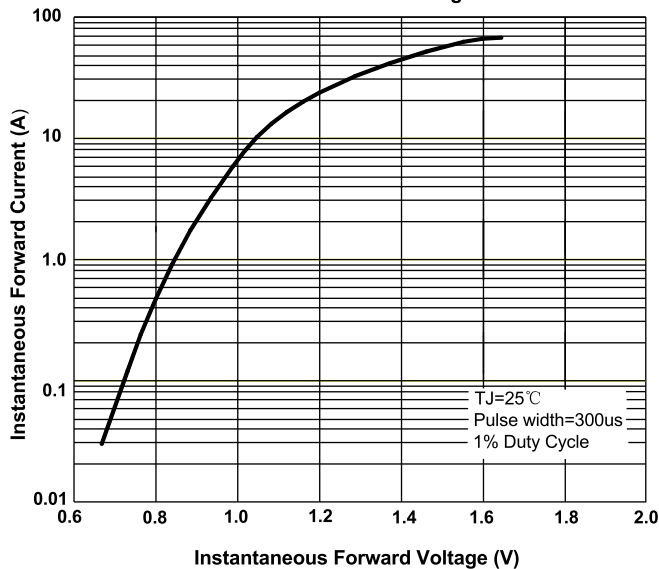
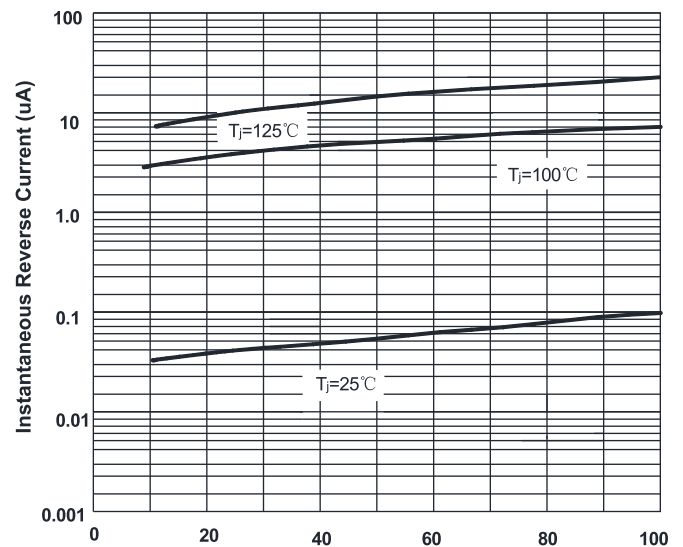
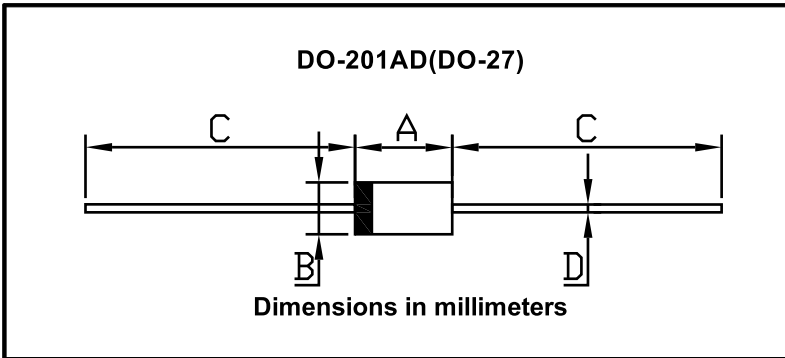


FIG.4: Typical Reverse Characteristics



■ **OUTLINE DIMENSIONS**



DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30