

# **General Purpose Rectifier**

#### **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



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



• Package: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	1N540 0G	1N540 1G	1N540 2G	1N540 4G	1N540 6G	1N540 7G	1N540 8G
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	٧	50	100	200	400	600	800	1000
Average Forward Current @Half-sine wave, Resistance load, Tc(Fig.1)	lo	Α	3						
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, Ta=25℃	IFSM	Α	125						
Current squared time @1ms≤t8.3≤ms Ta=25°C,Rating of per diode	l²t	A <sup>2</sup> s	64.8						
Thermal Resistance(Typical) @Between junction and case	R <sub>0J-A</sub>	°C/W	30						
Storage Temperature	Tstg	$^{\circ}\mathbb{C}$	-55 ~ <b>+</b> 150						
Junction Temperature	T <sub>j</sub>	$^{\circ}\mathbb{C}$	-55 ~ <b>+</b> 150						

#### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions	1N540 0G	1N540 1G	1N540 2G	1N540 4G	1N540 6G	1N540 7G	1N540 8G
Peak Forward Voltage	VFM	V	I F =3.0A	1.1						
Peak Reverse Current	I <sub>RRM</sub>	μА	VR =V <sub>DC</sub> @Ta=25°C	2.5						
			VR =V <sub>DC</sub> @Ta=125℃	50						



## ■ Characteristics (Typical)

FIG.1: Io-Ta Curve

8 3.0 2.4 1.2 Single Phase Half Wave 60HZ Resisteve or Inductive Load 0.375"(9.5mm) Lead Length 0 \_ 150 Ta(℃) 50 100

FIG.2: Forward Surge Current Capability

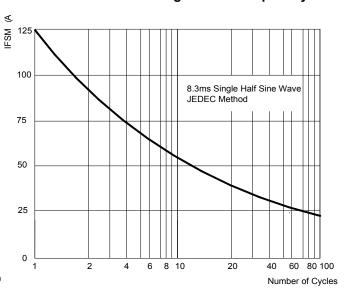


FIG.3: Forward Voltage

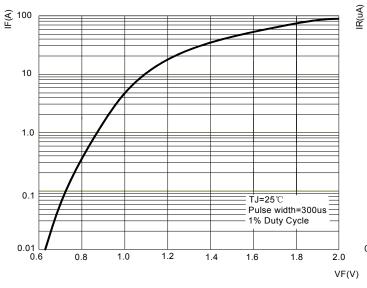
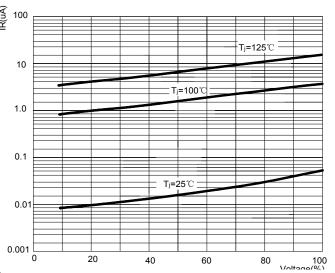


FIG.4: Typical Reverse Characteristics

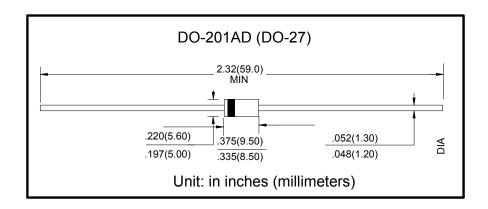




## ■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE	
1N5400G THRU 1N5408G	DO-27	1000	1000	10000	Ammo box	
		1250	1250	12500	Ammo box	

#### **■ Outline Dimensions**





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