

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.

Mechanical Data

• Package:DO-41

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	1N400 1G	1N400 2G	1N400 3G	1N400 4G	1N400 5G	1N400 6G	1N400 7G
Maximum Repetitive Peak Reverse Voltage		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	V	50	100	200	400	600	800	1000
Average Forward Current @Half-sine wave, Resistance load, Tc(Fig.1)	lo	А	1.0						
Forward Surge Current (Non-repetitive) @60HZ sine wave, 1 cycle, Ta=25℃	IFSM	А	30						
Current squared time @1ms≤t8.3≤ms Ta=25℃,Rating of per diode	l²t	A ² s	3.7						
Thermal Resistance(Typical) @Between junction and case	R _{0J-A}	°C/W	60						
Storage Temperature	Tstg	$^{\circ}$ C	-55 ~ + 150						
Junction Temperature	Tj	$^{\circ}$	-55 ~ + 150						

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

PARAMETER	Symbol	Unit	Conditions	1N400 1G	1N400 2G	1N400 3G	1N400 4G	1N400 5G	1N400 6G	1N400 7G
Peak Forward Voltage	VFM	V	I F =1.0A	1.1						
Peak Reverse Current	I _{RRM}	μА	VR =V _{DC} @Ta=25℃	2.5						
			VR =V _{DC} @Ta=125℃	50						



■ Characteristics (Typical)

FIG.1: Io-Ta Curve

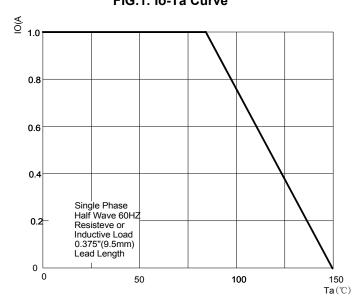


FIG.2: Forward Surge Current Capability

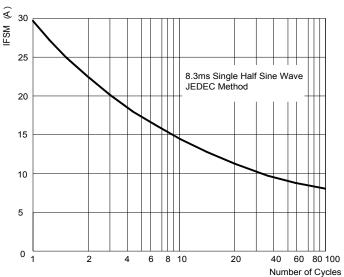


FIG.3: Forward Voltage

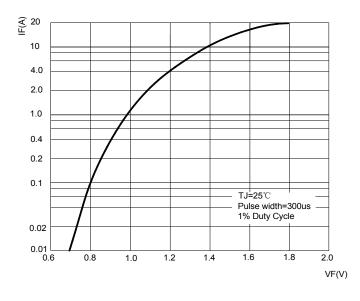
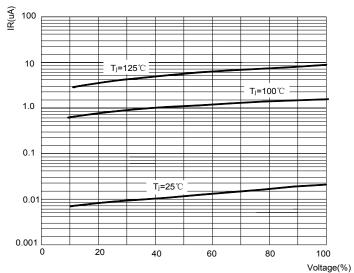


FIG.4: Typical Reverse Characteristics

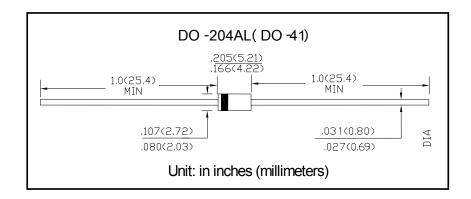




■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE	
1N4001G THRU 1N4007G	DO-41	5000	5000	50000	Ammo box	

■ Outline Dimensions





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