

1N5400 THRU 1N5408

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 3.0Amperes

FEATURES

- . The plastic package has Underwrites Laboratory
- Flammability Classification 94V-0
- . Construction utilizes void-free molded plastic technique
- . High surge current capability
- . 3.0A operation at $TL=75\,^\circ\!\mathrm{C}$ with no thermal runaway
- . Typical TR less than 0.1 μ A
- . High temperature soldering guaranteed: 250 $^\circ\!\mathrm{C}/10$ seconds,
- 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

MECHANICAL DATA

- . Case: JEDEC DO-15 molded plastic body
- . Terminals: lead solderable per MIL-STD-750,method 2026
- . Polarity: Color band denotes cathode end
- . Mounting Position: Any
- . Weight: 0.042 ounce, 1.19 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25 $^\circ$ C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive)

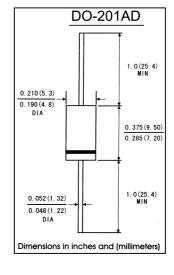
load. For capacitive load, derate by 20%)

		Symbols	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	Units
Maximum repetitive peak reverse voltage		Vrrm	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS voltage		VRMS	35	70	140	210	280	350	420	560	700	Volts
Maximum DC blocking voltage		VDC	50	100	200	300	400	500	600	800	1000	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at TA=70 $^\circ\!\mathrm{C}$		I(AV)	3.0									Amps
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)TA=70 $^\circ\!C$		IFSM	200.0								Amps	
Maximum instantaneous forward voltage at 1.5 A		VF	1.1									Volts
Maximum reverse	TA=25℃	- IR	10.0 300.0									μΑ
current at rated DC blocking voltage	TA=100℃	IX										
Typeical thermal resistance(Note 2)		$R \theta$ ja	20.0									°C/w
Typical junction Capacitance(Note 1)		CJ	35.0									pF
Maximum DC Blocking Voltage temperature		TA	+150.0									°C
Operating and storage temperature range		TJ Tstg	-50 to +175									°C

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC

2. Thermal resistance from juntion to ambient and from junction lead at 0.375" (9.5mm) lead length,

P.C.B. Mounted





1N5400 THRU 1N5408

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 3.0Amperes

RATINGS AND CHARACTERISTIC CURVES 1N5400 THRU 1N5408

FLG.1-FORWARD CURRENT DERATING CURVE

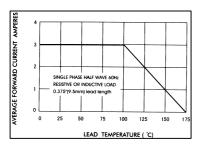


FIG.3-MAXIMUM NON-REPETITIVE PEAK

FORWARD SURGE CURRENT

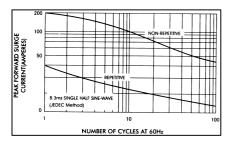


FIG.5-TYPICAL JUNCTION CAPACITANCE

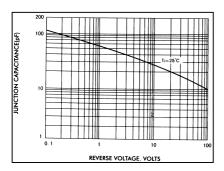


FIG.2-TYPICAL INSTANTANEOUS FORWARD

CHARACTERISTICS

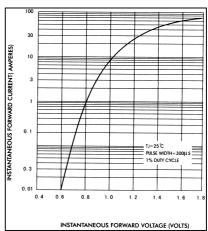


FIG.4-TYPICAL REVERSE CHARACTERISTICS

