DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

THRU 1N5408

1N5400

TECHNICAL SPECIFICATIONS OF GENERAL PURPOSE SILICON RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

FEATURES

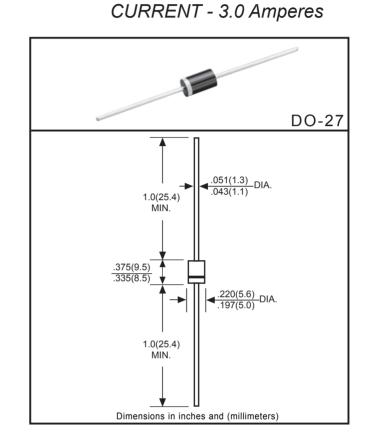
- * Low cost
- * Low leakage current
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94-V0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.18 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.



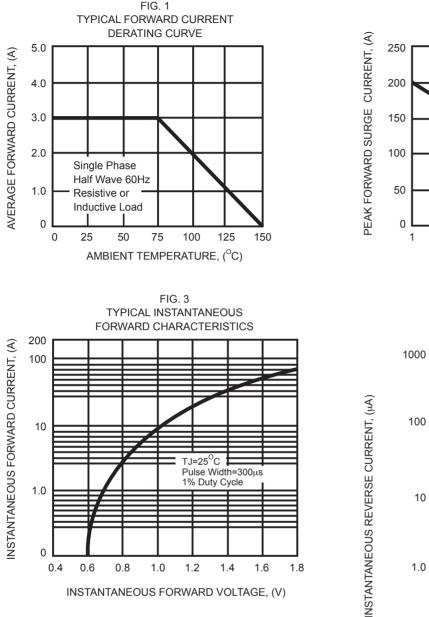
	SYMBOL	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	UNITS
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 375" (9.5mm) lead length at TA = 75°C	lo	3.0						Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	200						Amps	
Maximum Instantaneous Forward Voltage at 3.0A DC	VF	1.1					Volts		
Maximum DC Reverse Current at Rated @TJ = 25°C	IR	5.0							μAmps
DC Blocking Voltage $@TJ = 125^{\circ}C$		500							
Typical Junction Capacitance (Note 1)	CJ	30						рF	
Typical Thermal Resistance (Note 2)	Reja	20						°C/W	
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150						°C	

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Note 1 :Measured at 1 MHz and applied reverse voltage of 4.0 volts.

Note 2 :Typical thermal resistsnce from junction to ambient.

RATING AND CHARACTERISTIC CURVES (1N5400 THRU 1N5408)



INSTANTANEOUS FORWARD VOLTAGE, (V) 1 FIG 5 TYPICAL JUNCTION CAPACITANCE ПТ Т Ŧ TJ=25°C ПП П

100

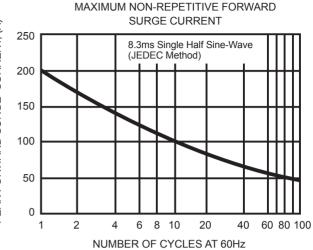
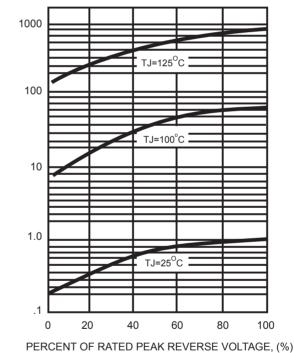


FIG. 2

FIG. 4 TYPICAL REVERSE CHARACTERISTICS



100

10

0 .1 .2 .4

2 4

REVERSE VOLTAGE, (V)

1.0

10 20 40

JUNCTION CAPACITANCE, (pF)

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