

Rectifier diodes

Order code	Manufacturer code	Description
47-3152	n/a	1N5408 3A 1000V SILICON RECTIFIER DIODE RC
47-3144	n/a	1N5401 3A 100V SILICON RECTIFIER DIODERC
47-3146	n/a	1N5402 3A 200V SILICON RECTIFIER DIODERC
47-3148	n/a	1N5404 3A 400V SILICON RECTIFIER DIODERC
47-3150	n/a	1N5406 3A 600V SILICON RECTIFIER DIODERC

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The enclosed information is believed to be correct, Information may change without notice due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	Revision A 20/02/2007

Semiconductors – Discrete Devices

DC components 1N5400 series – Silicon rectifier diodes



Features:

- Low forward voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost

Mechanical data:

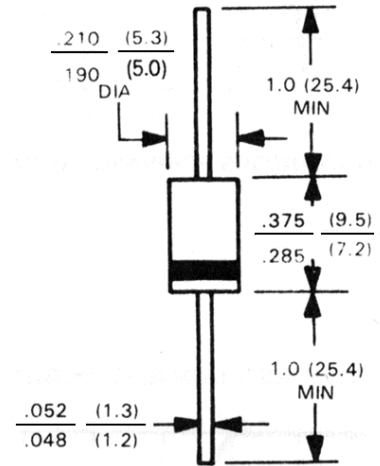
Case: Moulded plastic use UL-94V-O recognised flame retardant epoxy
Flame retardant epoxy

Terminals: Axial leads, solderable per MIL-STD-202, method 208

Polarity: Colour band denotes cathode

Mounting position: Any

Voltage range: 50 to 1000 Volts
Current: 3.0 Amperes



Maximum ratings and electrical characteristics:

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

Part no.	1N5401	1N5402	1N5404	1N5406	1N5408	Units
*Maximum recurrent peak voltage:	100	200	400	600	1000	V
Maximum RMS voltage:	70	140	280	420	700	V
*Maximum DC blocking voltage to T _A - 150°C:	100	200	400	600	1000	V
*Maximum average forward rectified current – 0.5inch (12.5mm lead length at T _A = 75°C:	3.0					A
*Peak forward surge current 8.3ms single half sine-wave:	200					A
*Maximum forward voltage at 3.0A peak:	0.95					V
*Maximum reverse current, T _A = 25°C:	10					µA
At rated DC blocking voltage, T _A = 150°C:	500					µA
*Maximum full load reverse current, full cycle average, 0.5inch (12.5mm) lead length T _A = 105°C:	500					µA
Typical junction capacitance (see note 1):	50					pF
*Storage temperature range T _A :	-65 to +175					°C
*Operating temperature range T _J :	-65 to +170					°C

NOTE 1: Measured at 1Mhz and applied reverse voltage of 4.0 Volts.

* JEDEC registered value.

Rating and characteristic curves

Fig. 1 – TYPICAL FORWARD CHARACTERISTICS

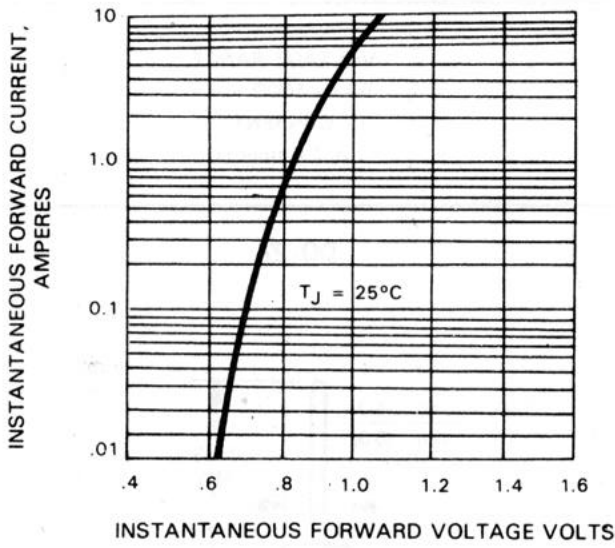


Fig. 2 – PEAK FORWARD SURGE CURRENT

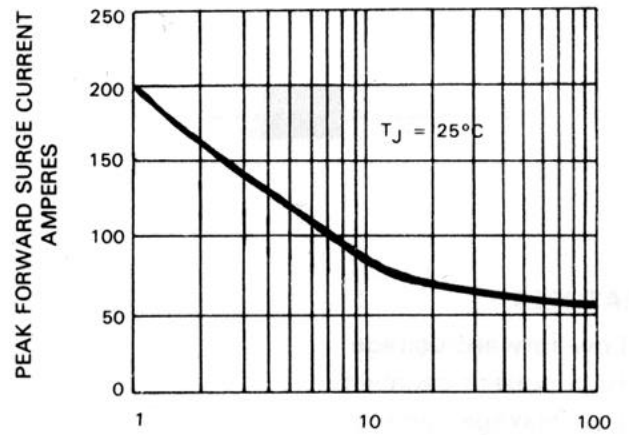


Fig. 3 – FORWARD CURRENT DERATING CURVE

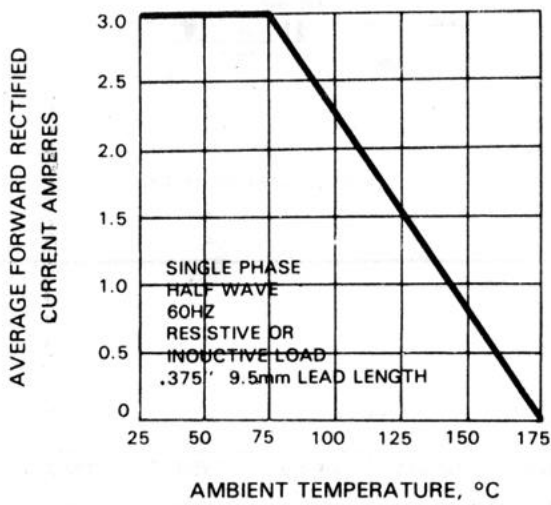


Fig. 4 – TYPICAL JUNCTION CAPACITANCE

