

1N5391 - 1N5399

PRV : 50 - 1000 Volts
I_o : 1.5 Amperes

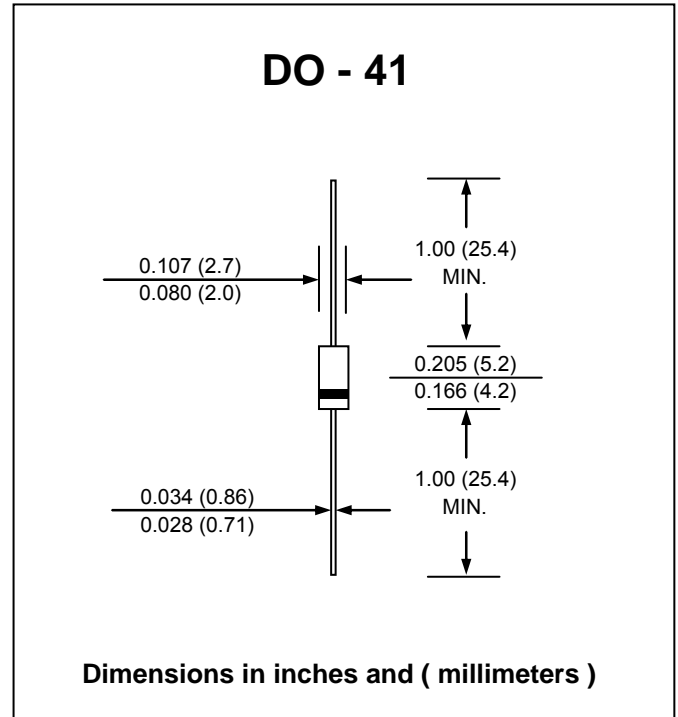
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.34 gram

SILICON RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

RATING	SYMBOL	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 70 °C	I _F	1.5									A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	50									A
Maximum Forward Voltage at I _F = 1.5 Amps.	V _F	1.1									V
Maximum DC Reverse Current at rated DC Blocking Voltage	Ta = 25 °C	5.0									µA
	Ta = 100 °C	50									µA
Typical Junction Capacitance (Note1)	C _J	15									pF
Typical Thermal Resistance (Note2)	R _{θJA}	26									°C/W
Junction Temperature Range	T _J	- 65 to + 175									°C
Storage Temperature Range	T _{STG}	- 65 to + 175									°C

Notes :

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc
- (2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES (1N5391 - 1N5399)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

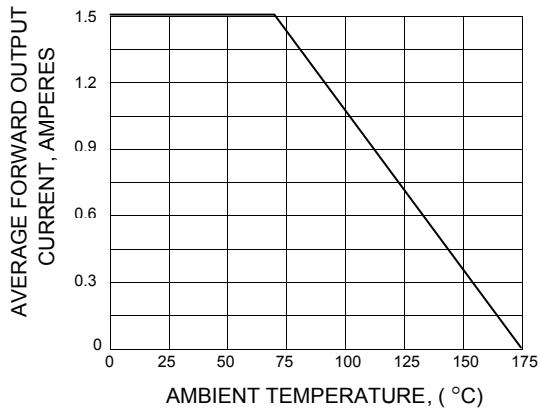


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

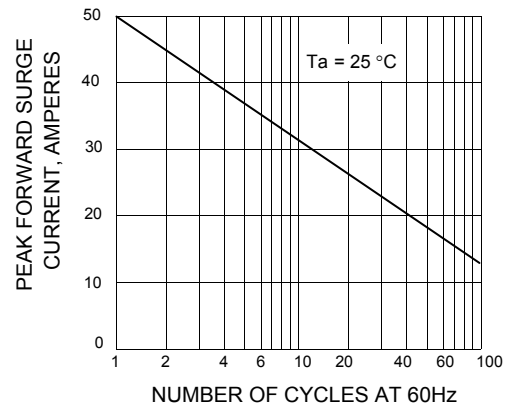


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

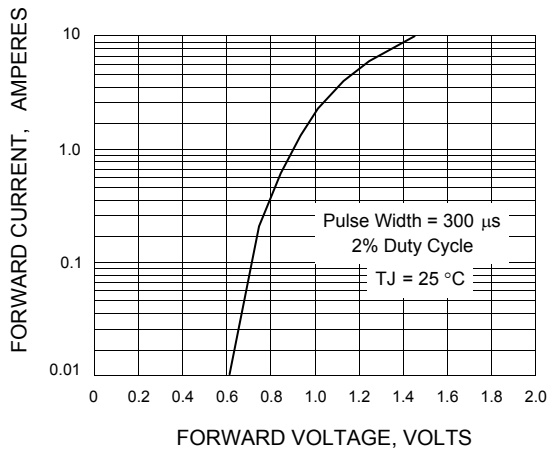


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

