Certificate TH97/10561QM Certificate TW00/17276EM

1N5391 - 1N5399

SILICON RECTIFIER DIODES

PRV : 50 - 1000 Volts
Io : 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

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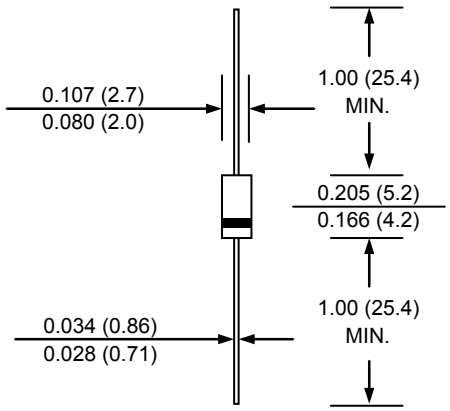

Dimensions in inches and (millimeters)

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	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	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 Ta = 25 °C	I_R	5.0									µA
at rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50									µA
Typical Junction Capacitance (Note1)	C_J	15									pF
Typical Thermal Resistance (Note2)	$R_{\Theta JA}$	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 V_{DC}

(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

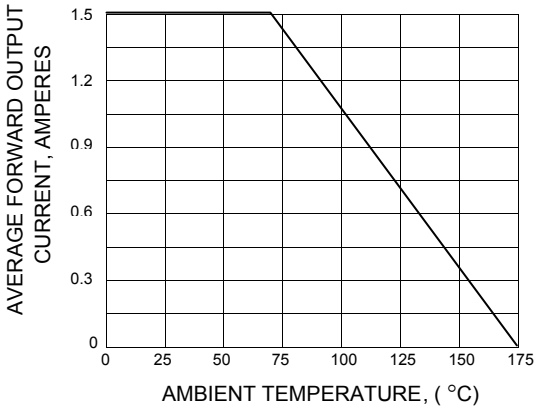

FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

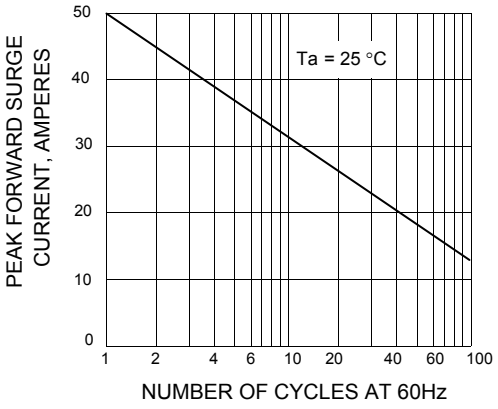

FIG.3 - TYPICAL FORWARD CHARACTERISTICS

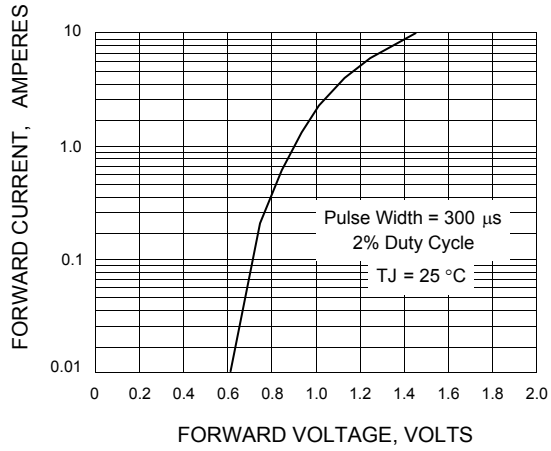

FIG.4 - TYPICAL REVERSE CHARACTERISTICS