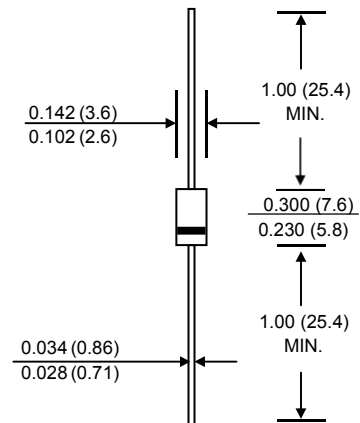


GENERAL PURPOSE RECTIFIER DIODE
FEATURES :

- Low reverse leakage
- High forward surge capability
- High reliability

MECHANICAL DATA

- Case : DO-15 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 : 0.4 gram

DO-15

Dimensions in inches and (millimeters)
MAXIMUM RATINGS AND CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	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
DC Blocking Reverse Voltage	V_R	50	100	200	300	400	500	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	350	420	560	700	V
Maximum Average Forward Rectified Current	I_F	1.5									A
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	50									A
Maximum full load reverse current, full cycle average, 0.375"(9.5mm) lead lengths at $T_A=70^\circ\text{C}$	$I_{R(AV)}$	300									μA
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	50									$^\circ\text{C/W}$
Maximum DC blocking voltage temperature	T_A	150									$^\circ\text{C}$
Operating and Storage Temperature	T_J, T_{STG}	-55 ~ +150									$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit
Maximum instantaneous forward voltage at 1.5A	V_F			1.4	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A = 25^\circ\text{C}$		5	μA
		$T_A = 100^\circ\text{C}$		300	
Typical junction capacitance at 4.0V, 1MHz	C_J		15		pF

GENERAL PURPOSE RECTIFIER DIODE

Typical Characteristics

Fig. 1 - Forward Current Derating Curve

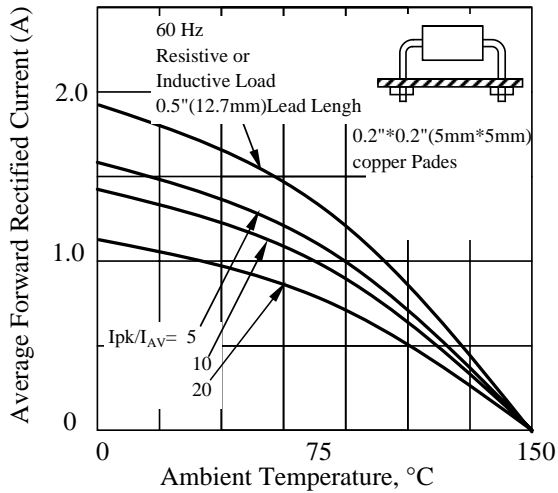


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

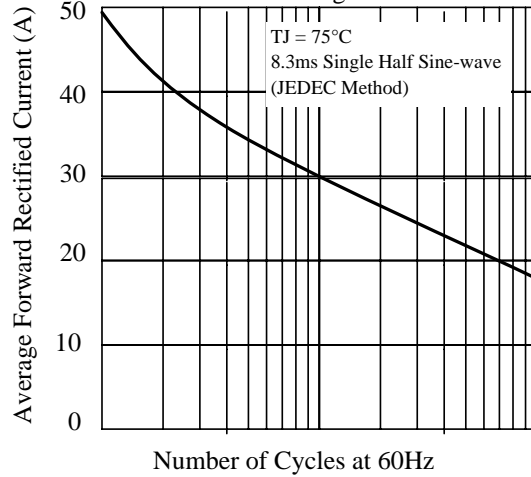


Fig 3. - Typical Instantaneous Forward Characteristics

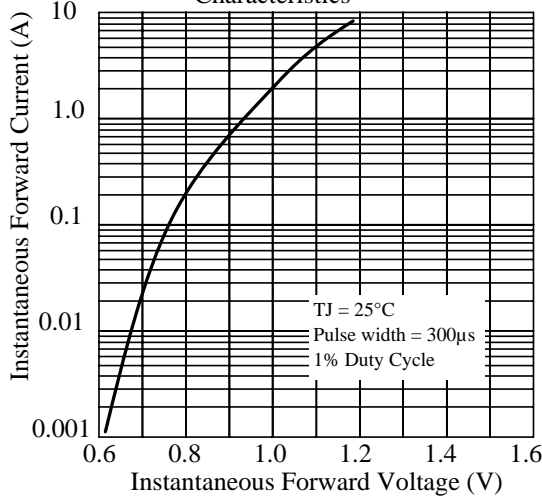


Fig 4. - Typical Reverse Characteristics

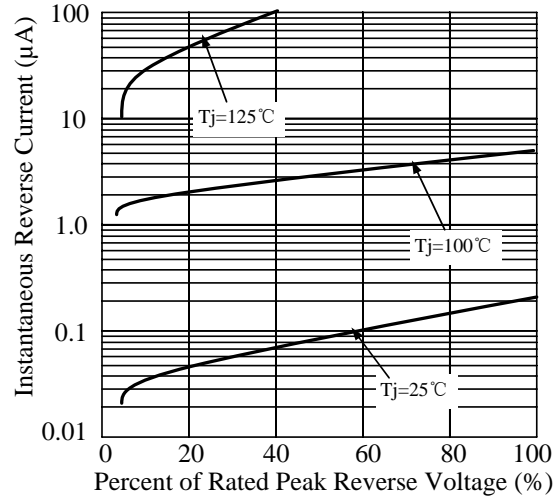


Fig 5. - typical transient thermal impedance

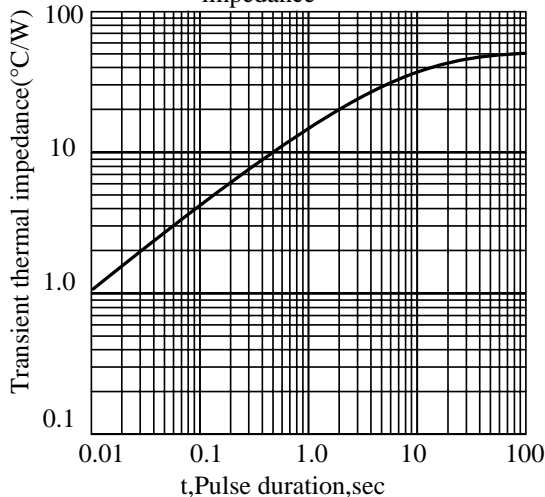


Fig 6. - Typical Junction Capacitance

