

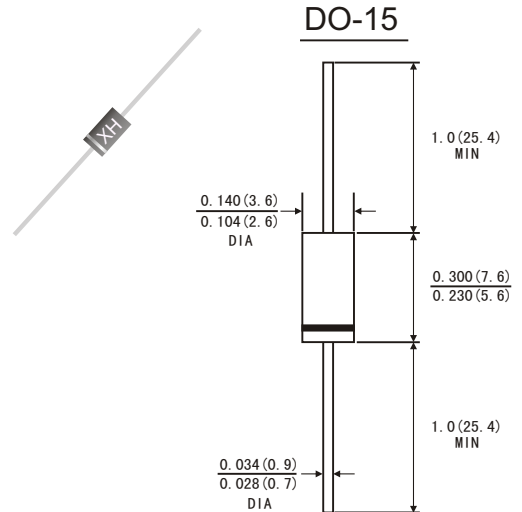


## FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High surge current capability
- 1.5 amperes operation at  $T_L=75^{\circ}\text{C}$  with no thermal runaway
- Low reverse leakage
- Low forward voltage drop
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed:  $260^{\circ}\text{C}/10$  seconds at terminals
- 0.375"(9.5mm) lead length,5lbs.(2.3kg)tension
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

## MECHANICAL DATA

- *Case:* JEDEC DO-15 molded plastic body
- *Terminals:* Lead solderable per MIL-STD-750,method 2026
- *Polarity:* Color band denotes cathode end
- *Mounting Position:* Any
- *Weight:* 0.014ounce, 0.33 gram



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at  $25^{\circ}\text{C}$  ambient temperature unless otherwise specified ,Single phase ,half wave 60Hz.,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	RL 151	RL 152	RL 153	RL 154	RL 155	RL 156	RL 157	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at $T_A=75^{\circ}\text{C}$	$I_{(AV)}$	1.5							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50.0							Amps
Maximum Instantaneous Forward Voltage at 1.5 A	$V_F$	1.4							Volts
Maximum Reverse current at rated DC Blocking Voltage	$T_c = 25^{\circ}\text{C}$	5.0							$\mu\text{A}$
	$T_c = 100^{\circ}\text{C}$	50.0							
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	50.0							$^{\circ}\text{C}/\text{W}$
Typical Junction Capacitance (Note 1)	$C_J$	20.0							pF
Operating and Storage temperature Range	$T_J$ $T_{STG}$	-65 to+175							$^{\circ}\text{C}$

*Note:* 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length , P.C.B. mounted



FIG.1-FORWARD CURRENT DERATING CURVE

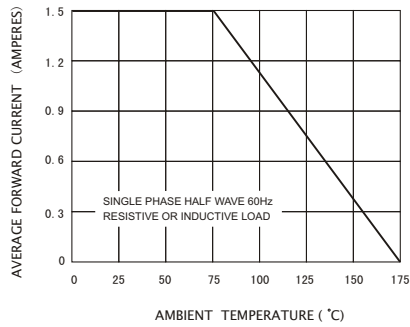


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

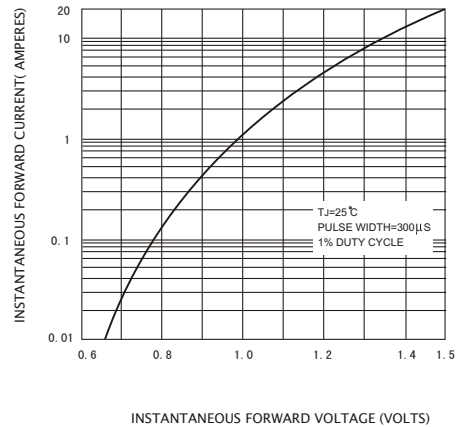


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

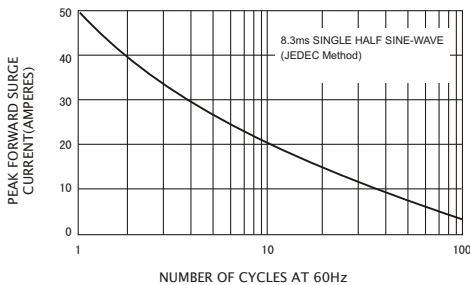


FIG.4-TYPICAL REVERSE CHARACTERISTICS

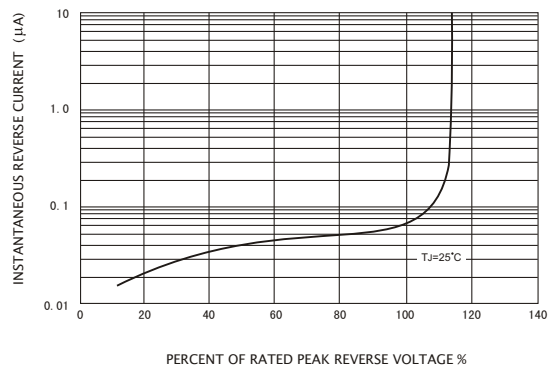


FIG.5-TYPICAL JUNCTION CAPACITANCE

