

Low forward voltage Schottky Barrier Rectifier

Reverse Voltage - 40 to 200 V

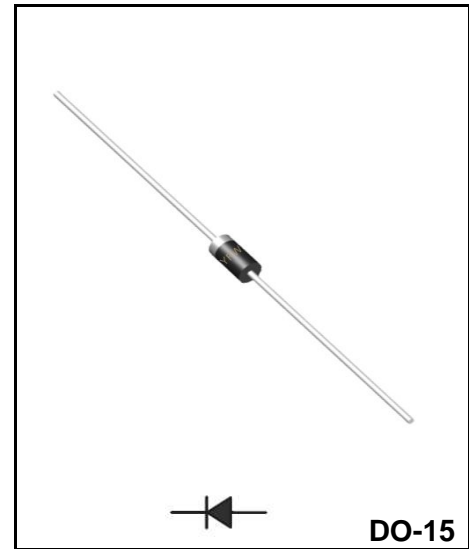
Forward Current - 2.0A

FEATURES

- ◆Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- ◆Guard ring for overvoltage protection
- ◆High current capability, low forward voltage drop
- ◆Low power loss, high efficiency
- ◆High surge capability

MECHANICAL DATA

- ◆Case: DO-15
- ◆Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- ◆Polarity: Color band denotes cathode end
- ◆Mounting Position: Any
- ◆Marking: Type Number



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 current derate by 20 %.

Parameter	Symbols	2L40	2L45	2L50	2L60	2L80	2L100	2L150	2L200	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at $T_L = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	50								A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	14.94								A ² s
Maximum Instantaneous Forward Voltage at 2.0A	V_F	0.45		0.5		0.72		0.8		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^\circ\text{C}$ $T_a = 100\text{ }^\circ\text{C}$	I_R	0.1 10.0				0.05 5.0				mA
Typical Junction Capacitance ⁽²⁾	C_j	220				180				pF
Typical Thermal Resistance ⁽³⁾	$R_{\theta JA}$	75								°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150								°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

FIG. 1 - FORWARD CURRENT DERATING CURVE

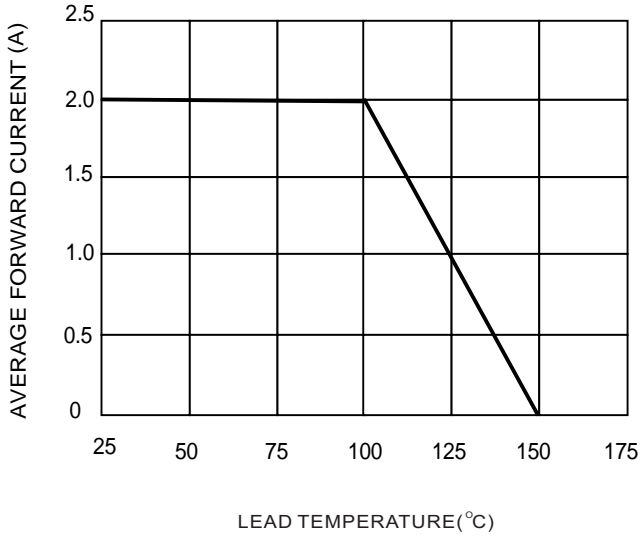


FIG.2-TYPICAL FORWARD CHARACTERISTICS

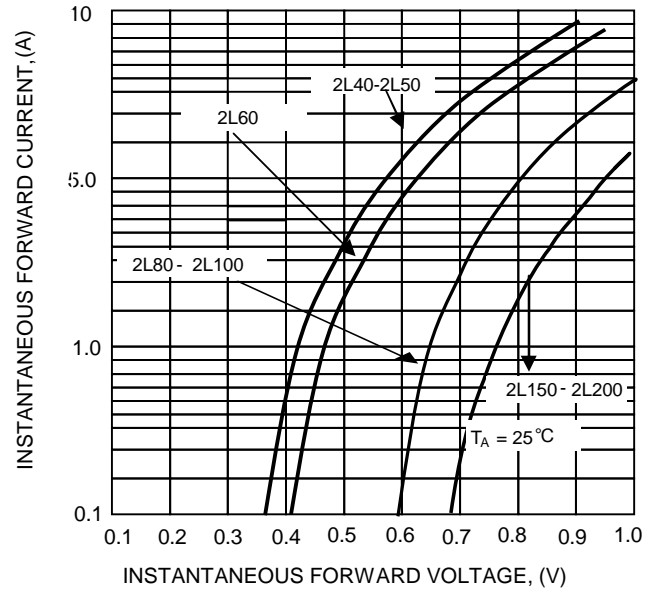


FIG. 3 MAXIMUM NON-REPETITIVE SURGE CURRENT

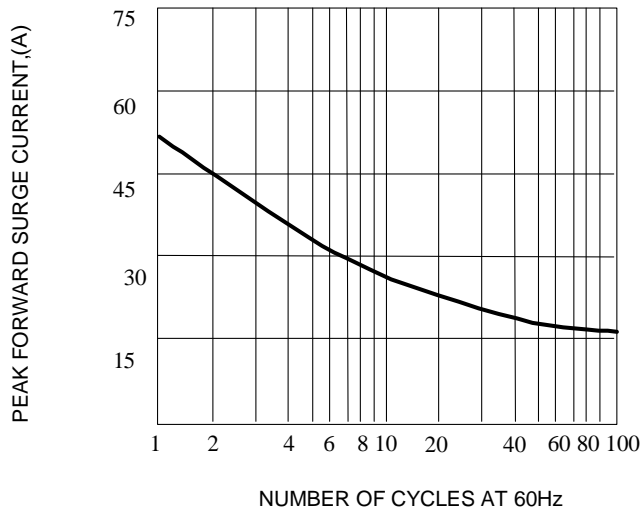
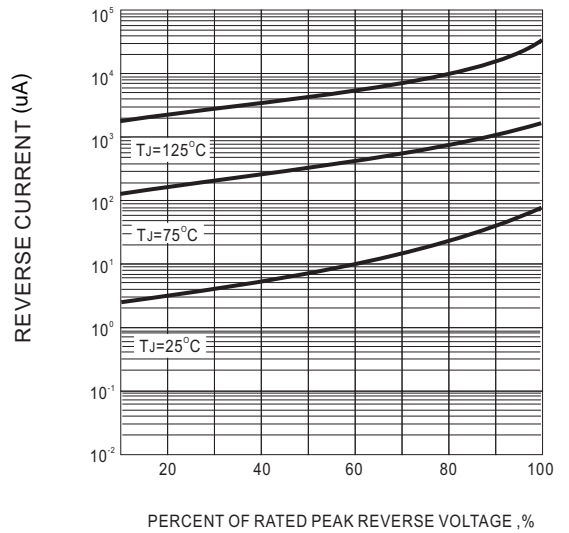


FIG.4 TYPICAL REVERSE CHARACTERISTIC



Ordering information

Package	Packing Description	Packing Quantity
DO-15	bulk	500PCS/Inner Box 30000PCS/Carton
	ammo pack	3000PCS/Inner Box 30000PCS/Carton

Package Dimensions

DO-15

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	5.80	7.60	0.230	0.300
B	2.60	3.60	0.104	0.140
C	0.71	0.86	0.028	0.034
D	25.4	-	1.00	-

The diagram shows a side view of a DO-15 package. It has a central rectangular body with two leads extending from it. Dimension A is the length of the central body. Dimension B is the length of the leads. Dimension C is the thickness of the leads. Dimension D is the length of the leads. Labels on the package include 'Cathode Mark', 'YFW', 'Model name', and 'xxxx'.

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