

Axial Lead Super Fast Rectifiers

(Pb) Lead(Pb)-Free

Features:

- * Low forward voltage drop.
- * High current capability.
- * High reliability.
- * High surge current capability.

Mechanical Data:

- * Case: Molded plastic.
- * Epoxy: UL 94V-0 rate flame retardant.
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed.
- * Polarity: Color band denotes cathode end.
- * Mounting position: Any.
- * Weight: 0.40 grams.

REVERSE VOLTAGE
50 TO 600 VOLTS
CURRENT
2.0 AMPERE

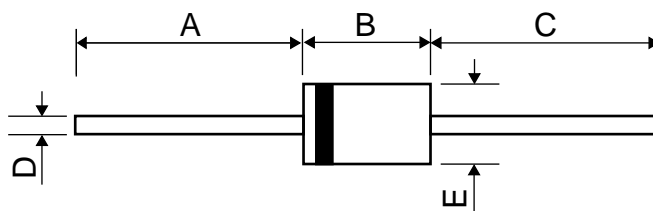


DO-15

DO-15 Outline Dimensions

Unit:mm

Axial Device (Through-Hole)



Dim	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DO-15	25.4	-	5.8	7.6	25.4	-	0.7	0.9	2.6	3.6

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified. Single Phase Half Wave, 60Hz, Rectified or Inductive Load. For Capacitive Load, Derate Current By 20%.

Characteristics	Symbol	SF21	SF22	SF23	SF24	SF25	SF26	SF27	SF28	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @ $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC)	I_{FSM}	50								A
Maximum Instantaneous Forward Voltage At 2.0A	V_F	0.97			1.25		1.50			V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_R					5.0				μA
Typical Junction Capacitance (Note 1)	C_J					60				pF
Maximum Reverse Recovery Time (Note 2)	T_{rr}					35				nS
Operating Temperature Range	T_J	+150								$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150								$^\circ\text{C}$

NOTES: 1. Measured At 1MHz and Applied Reverse Voltage of 4.0 V.D.C

2. Reverse Recovery Time Test Condition: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

RATING AND CHARACTERISTIC CURVES

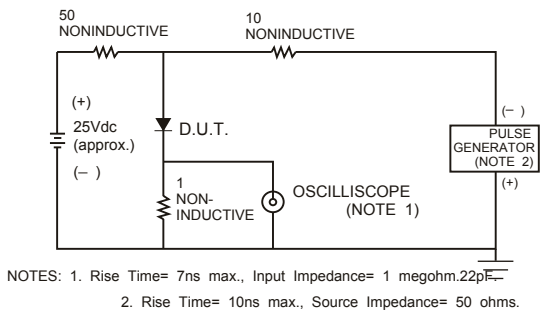
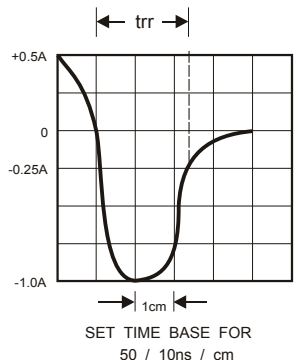


FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY



TIME CHARACTERISTIC

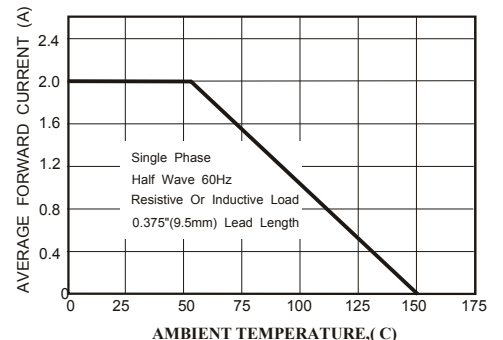


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

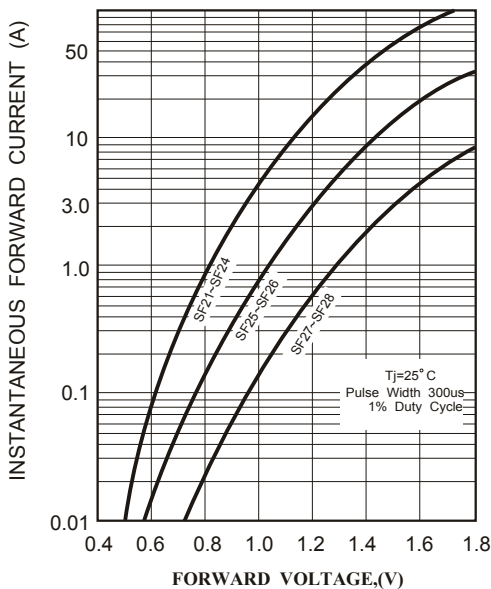


FIG.3 TYPICAL FORWARD CHARACTERISTICS

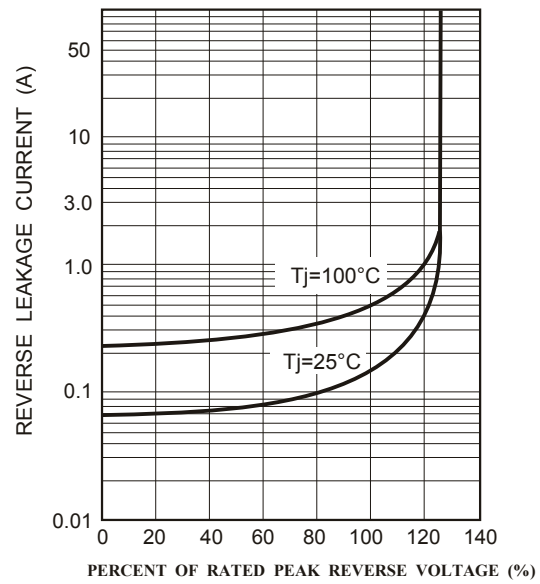


FIG.4 TYPICAL REVERSE CHARACTERISTICS

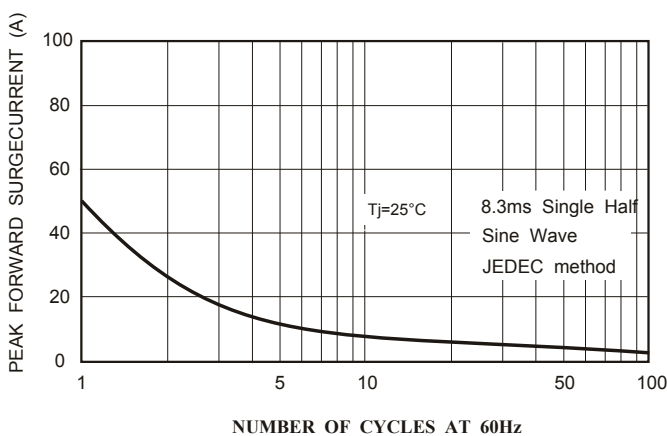


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

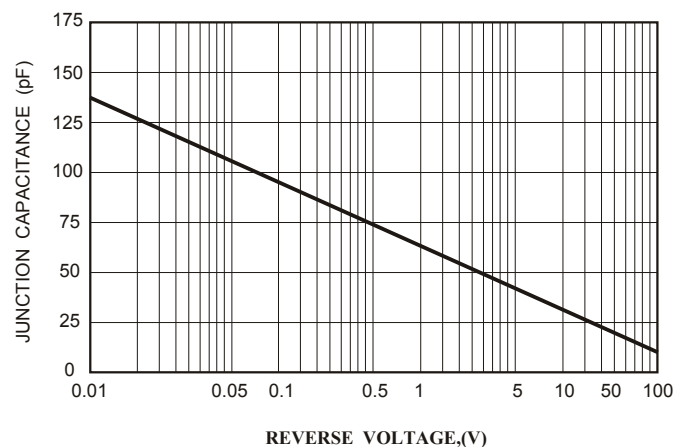


FIG.6 TYPICAL JUNCTION CAPACITANCE