WEITRON

1N4933 Thru 1N4937

Axial Lead Fast Recovery Rectifier

Lead(Pb)-Free

REVERSE VOLTAGE
50-600 VOLTS
FORWARD CURRENT
1.0 AMPERE

Features:

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

DO-41

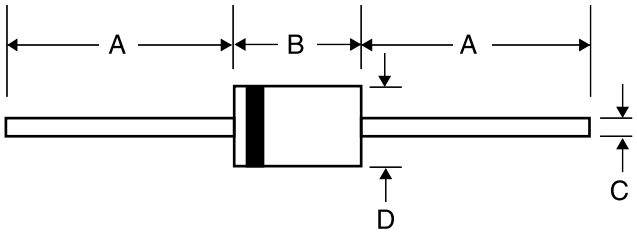
Mechanical Data:

* Case: Molded plastic
*Epoxy: UL 94V-0 rate flame retardant
*Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
*Polarity: Color band denotes cathode en
*Mounting position: Any
*Weight: 0.34grams

DO-41 Outline Dimensions

Unit:mm

Axial Device (Through-Hole)



	A		B		C		D	
Dim	Min	Max	Min	Max	Min	Max	Min	Max
DO-41	25.40	-	4.06	5.20	0.70	0.90	2.00	2.70

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load, 60Hz.

Characteristic	Symbol	FR101	FR102	FR103	FR104	FR105	Uuits
Maximum repetitive peak reverse voltage @ I_T = 5μA	V_{RRM}	50	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	560	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	V
Maximum average forward rectified current @ T_a = 55˚C	I_F	1.0					A
Peak Forward Surge Current IFM (surge):8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30					V
Maximum Instantaneous Forward Voltage at Specified Current	V_F	1.2					V
Maximum DC Reverse Current TA=25°C TA=100°C	I_R	5.0 500					μA
Maximum Reverse Recovery Time[1]	T_{rr}	200					nS
Typical Junction Capacitance[2]	T_J	12					μA
Typical Junction Resistance[3]	$R_{\theta JA}$	41					μA
Operating and Storage temperature range	T_j, T_{STG}	-55 to +150					℃

NOTES: 1.Reverse Recovery Test Conditions: IF=.5A, IR=1A, Irr=.25A
2.Measured at 1 MHz and applied reverse voltage of 4.0 VDC
3.Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

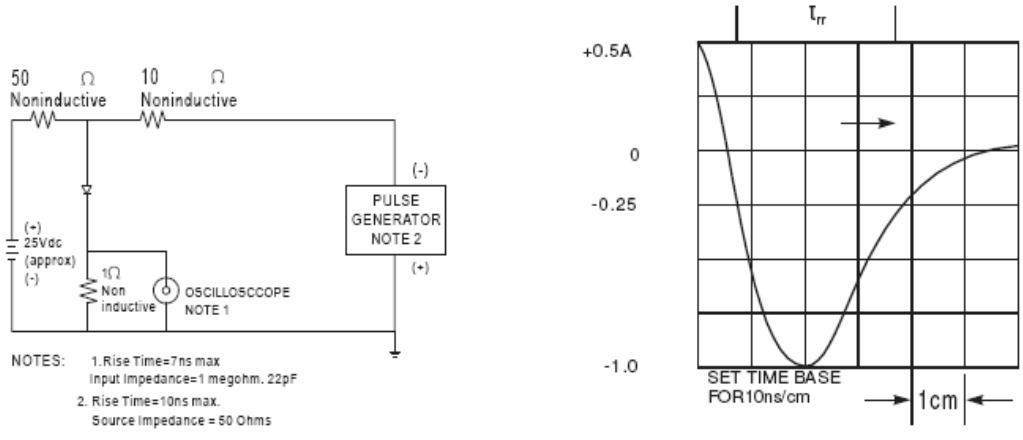


Fig.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

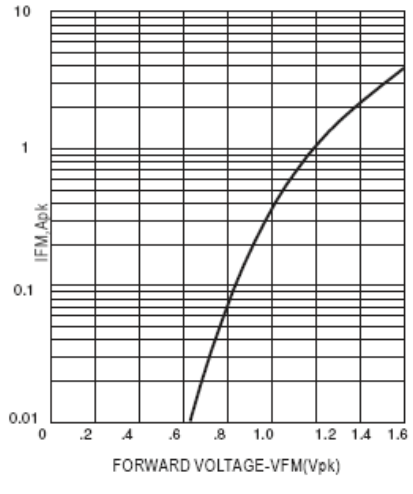


Fig. 2- FORWARD CHARACTERISTICS

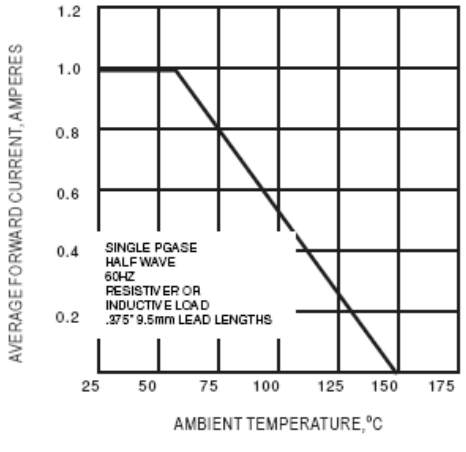


Fig.3- FORWARD CURRENT DERATING CURVE

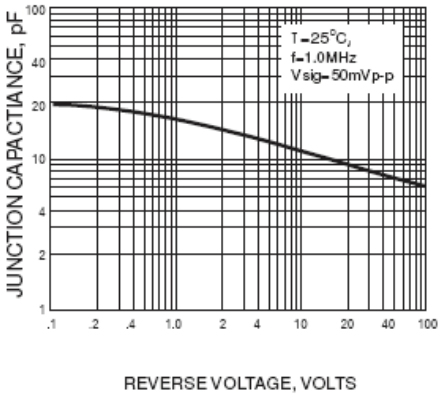


Fig.4- TYPICAL JUNCTION CAPACITANCE

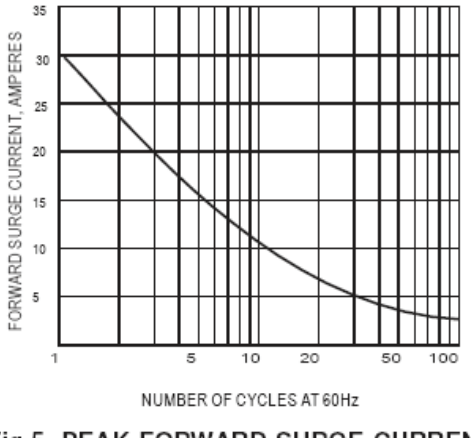


Fig.5- PEAK FORWARD SURGE CURRENT