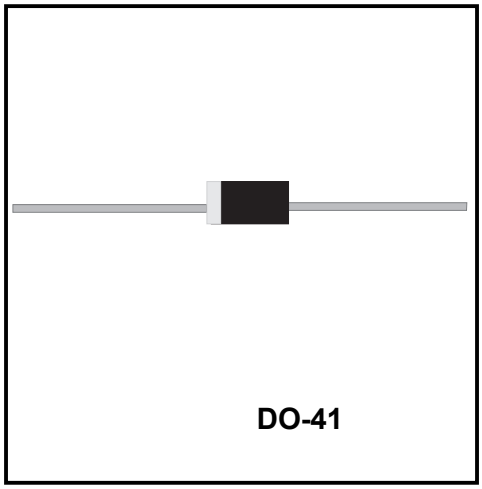
1.5 AMP FAST RECOVERY RECTIFIERS

Reverse Voltage - 50 to 1000 V
Forward Current – 1.5 A



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 guranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.40 grams
- Both normal and Pb free product are available:
- Normal:80~95%Sn,5~20%Pb
- Pb free:99 Sn above can meet Rohs enviroment substance directive request

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ ambient temperature uniess otherwies specified. Single phase half wave, 60Hz, resistive or inductive load.For capacitive load, derate current by 20%.

TYPE NUMBER	FR151	FR152	FR153	FR154	FR155	FR156	FR157	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=75℃	1.5							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	50							A
Maximum Instantaneous Forward Voltage at 1.5A	1.3							V
Maximum DC Reverse CurrentTa=25℃	5.0							μA
at Rated DC Blocking VoltageTa=100℃	100							μA
Maximum Reverse Recovery Time (Note 1)	150				250	500		nS
Typical Junction Capacitance (Note 2)	30							pF
Operating and Storage Temperature Range T_J, T_{STG}	-65+150							C

NOTES:
1.Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

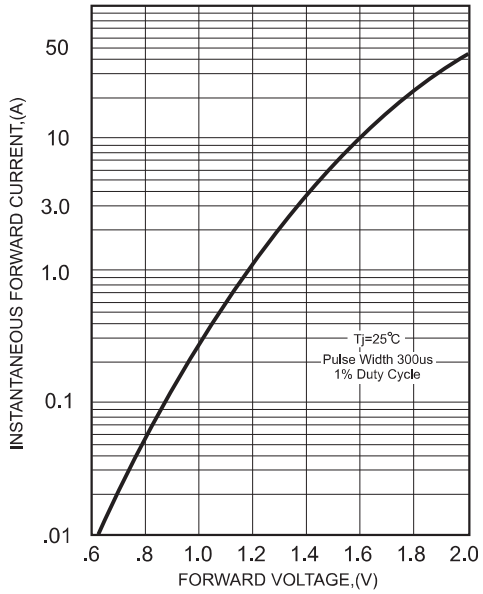


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

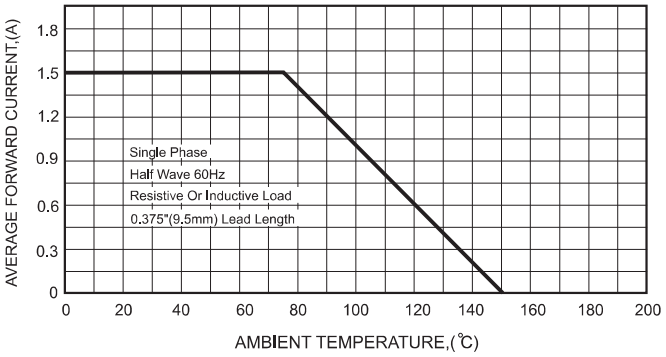
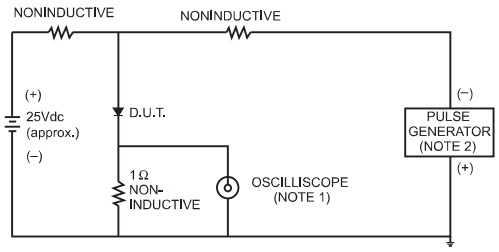
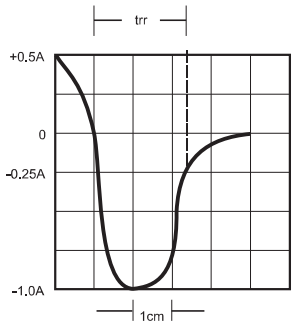


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.



SET TIME BASE FOR
50 / 10ns / cm

FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

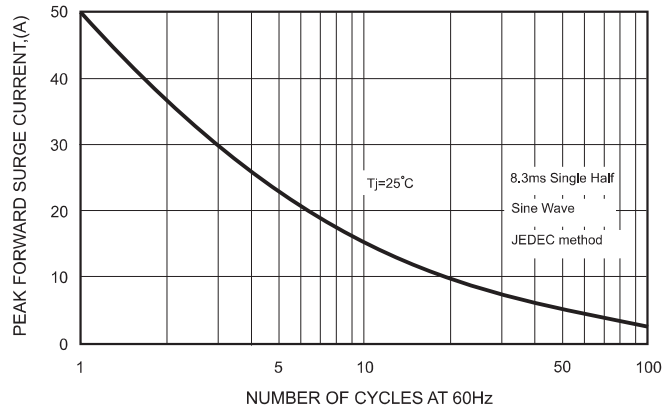
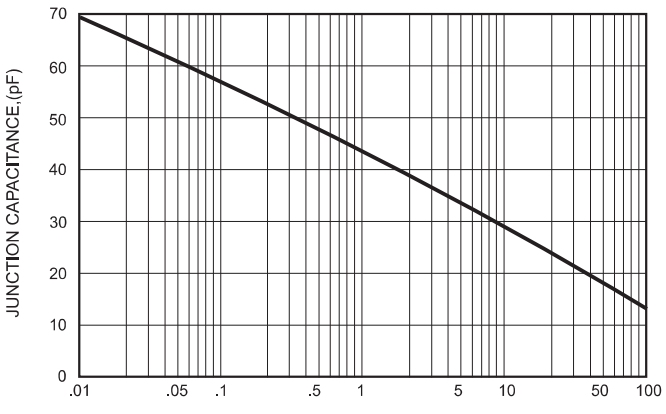
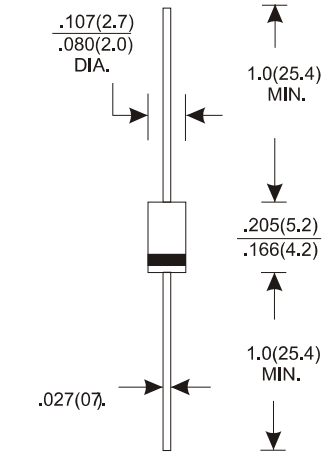


FIG.5-TYPICAL JUNCTION CAPACITANCE



Package Outline DO-41



Dimensions in inches and (millimeters)

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-41	BOX	1000/5000	EIA-481-1