

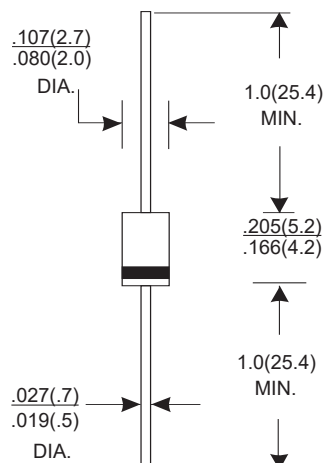
DO-41 Ultra-Fast Recovery Rectifier Diodes

FEATURES

- High current capability
- High reliability
- High surge current capability
- High speed switching

MECHANICAL DATA

- Case:JEDEC DO--41,molded plastic
- Terminals: Axial lead ,solderable per
- MIL- STD-202,Method 208
- Polarity: Color band denotes cathode
- Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

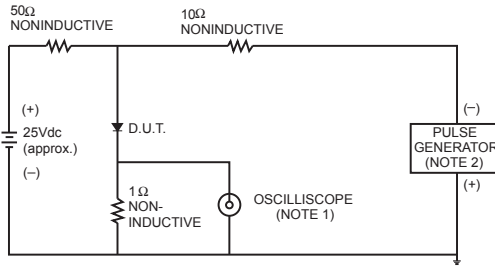
Parameter		Symbol	SF11	SF12	SF13	SF14	SF15	SF16	SF17	SF18	UNITS
Maximum recurrent peak reverse voltage		V _{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS voltage		V _{RMS}	35	70	105	140	210	280	420	560	V
Maximum DC blocking voltage		V _{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current.375"(9.5mm) Lead Length at T _A =75 °C		I _{F(AV)}	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	30.0								A
Maximum Instantaneous Forward Voltage at 1.0A		V _F	1.0				1.3		1.7		V
Maximum reverse current at rated DC blocking voltage	@T _A =25 °C	I _R	5.0								μ A
	@T _A =100 °C		100.0								
Maximum reverse recovery time (Note1)		t _{rr}	35								ns
Typical junction capacitance (Note2)		C _J	50								pF
Typical thermal resistance(Note3)		R _{θJA}	60								°C/W
Operating junction temperature range		T _j	- 55 ---- + 125								°C
Storage temperature range		T _{STG}	- 55 ---- + 150								°C

Note: 1.Reverse recovery condition $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES

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



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

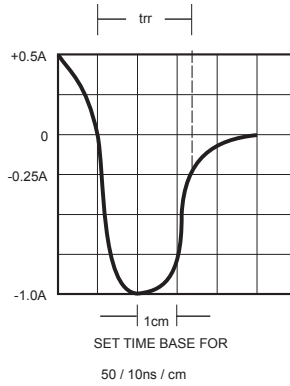


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

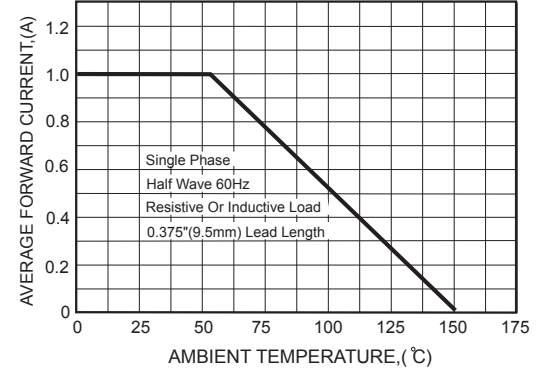


FIG.3-TYPICAL FORWARD CHARACTERISTICS

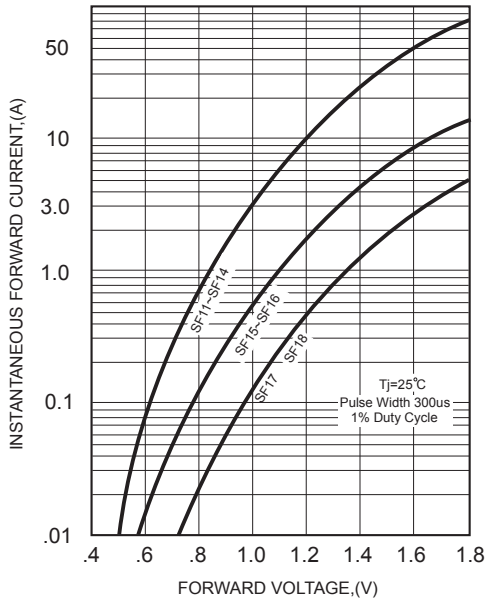


FIG.4-TYPICAL REVERSE CHARACTERISTICS

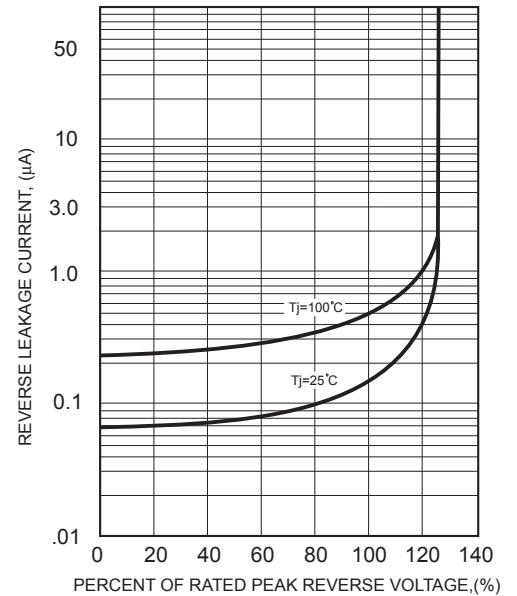


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

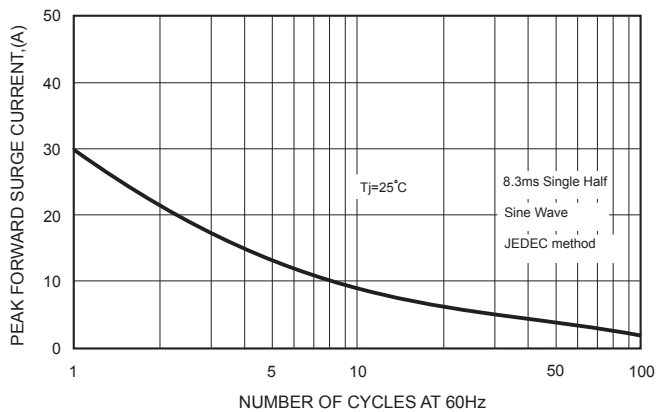


FIG.6-TYPICAL JUNCTION CAPACITANCE

