SF21-SF28

SUPER FAST RECTIFIERS

VOLTAGE RANGE: 50--- 600 V CURRENT: 2.0 A

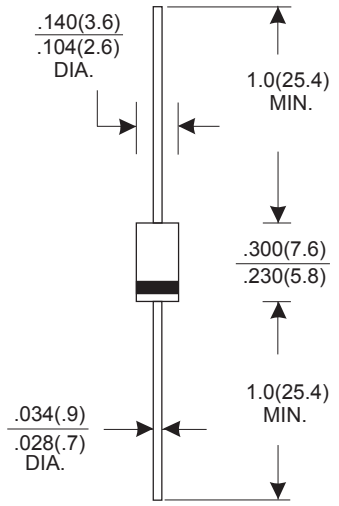
FEATURES

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

MECHANICAL DATA

- ●Case:JEDEC DO--15,molded plastic
- ●Terminals: Axial lead ,solderable per
- ●MIL- STD-202,Method 208
- ●Polarity: Color band denotes cathode
- ●Mounting position: Any

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.
For capacitive load,derate by 20%.

		SF21	SF22	SF23	SF24	SF25	SF26	SF27	SF28	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℃	$I_{F(AV)}$	2.0								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 2.0A	V_F	1.0				1.3		1.7		V
Maximum reverse current @T_A=25	I_R	5.0								μA
at rated DC blocking voltage @T_A=100		100.0								
Maximum reverse recovery time (Note1)	t_{rr}	35								ns
Typical junction capacitance (Note2)	C_J	40				30				pF
Typical thermal resistance(Note3)	$R_{\theta JA}$	65								℃/W
Operating junction temperature range	T_j	-65 ---- + 125								℃
Storage temperature range	T_{STG}	-65 ---- + 150								℃

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-MAXIMUM AVERAGE FORWARD CURRENT DERATING

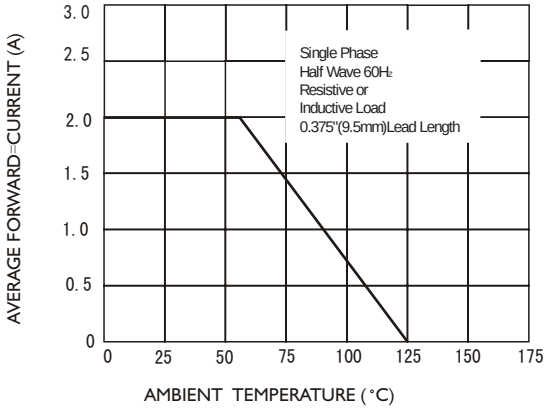


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

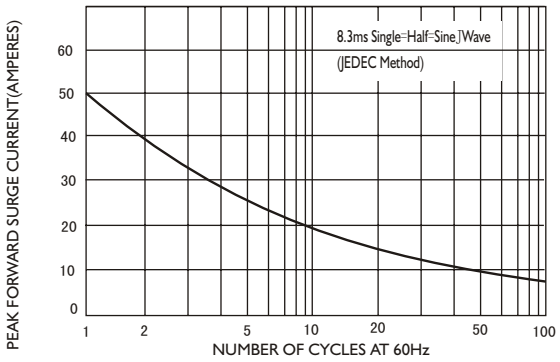


FIG.3-TYPICAL FORWARD CHARACTERISTICS

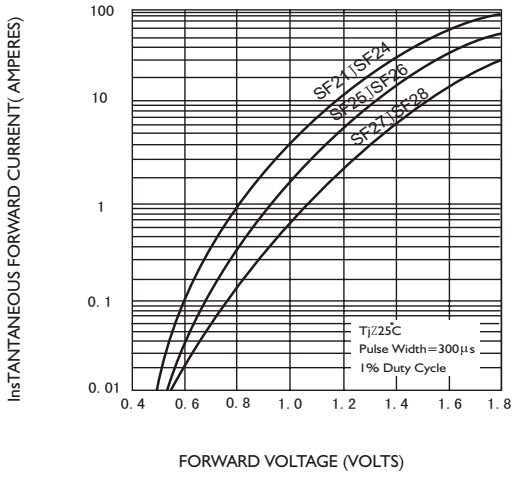


FIG.4-TYPICAL REVERSE CHARACTERISTICS

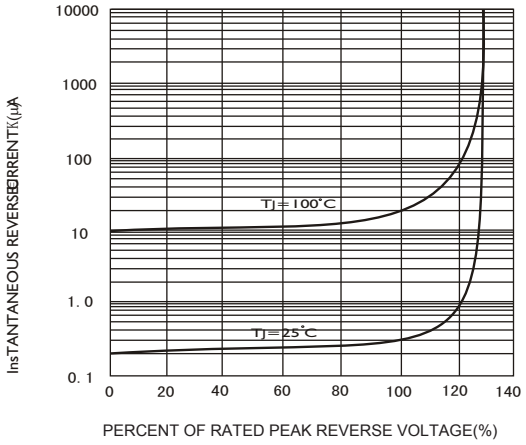


FIG.5 -- TYPICAL JUNCTION CAPACITANCE