

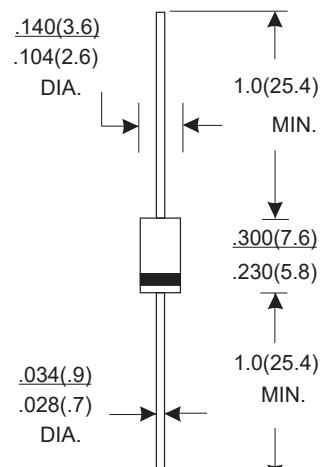
DO-15 Ultra-Fast Recovery Rectifier Diodes

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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	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 $T_A=75^\circ\text{C}$	$I_{F(AV)}$	2.0							A					
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC 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 at rated DC blocking voltage	I_R	$\begin{matrix} @T_A=25^\circ\text{C} \\ 5.0 \end{matrix}$ $\begin{matrix} @T_A=100^\circ\text{C} \\ 100.0 \end{matrix}$							μA					
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							$^\circ\text{C}/\text{W}$					
Operating junction temperature range	T_j	-65 ---- + 125							$^\circ\text{C}$					
Storage temperature range	T_{STG}	-65 ---- + 150							$^\circ\text{C}$					

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

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM AVERAGE FORWARD CURRENT DERATING

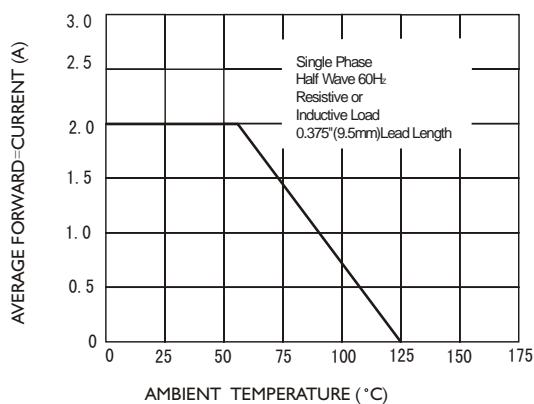


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

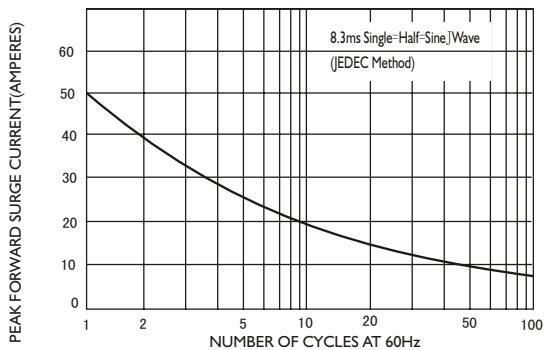


FIG.3-TYPICAL FORWARD CHARACTERISTICS

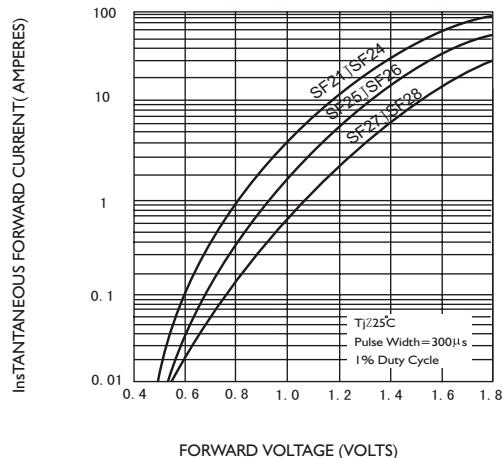


FIG.4-TYPICAL REVERSE CHARACTERISTICS

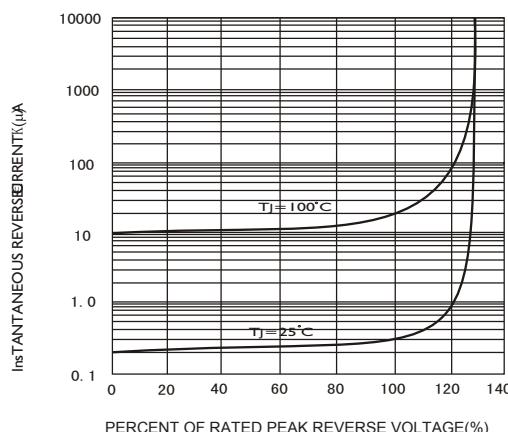


FIG.5 -- TYPICAL JUNCTION CAPACITANCE

