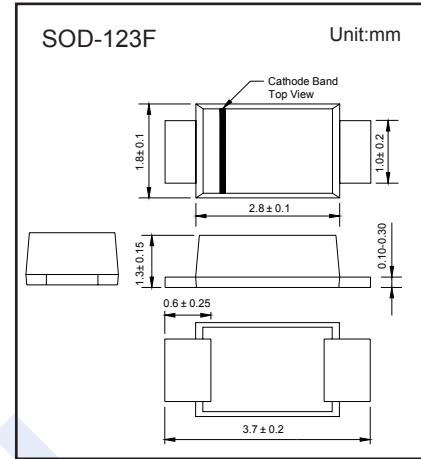


Fast Recovery Diodes

FR101F~FR107F

■ Features

- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	FR 101F	FR 102F	FR 103F	FR 104F	FR 105F	FR 106F	FR 107F	Unit	
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
RMS Voltage	V_{RMS}	35	70	140	280	420	560	700		
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000		
Forward Voltage at 1.0A	V_F	1.3								A
Averaged Forward Current. $T_a=65^\circ\text{C}$ (Note.1)	I_{FAV}	1								
Peak Forward Surge Current $T_L=25^\circ\text{C}$	I_{FSM}	20								μA
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ $T_a=125^\circ\text{C}$	I_R	5 50								
Reverse recovery time (Note.2)	t_{rr}	150			250		500		ns	
Typical Junction Capacitance (Note.3)	C_j	4								pF
Typical Thermal Resistance (Note.4)	$R_{\theta JA}$	180								$^\circ\text{C}/\text{W}$
Junction Temperature	T_j	150								$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 150								

Note.1: Averaged over any 20ms period.

Note.2: Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.

Note.3: Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Note.4: Thermal resistance junction to ambient, 6.0 mm² copper pads to each terminal.

■ Marking

NO.	FR101F	FR102F	FR103F	FR104F	FR105F	FR106F	FR107F
Marking	F1	F2	F3	F4	F5	F6	F7

Fast Recovery Diodes

FR101F~FR107F

■ Typical Characteristics

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

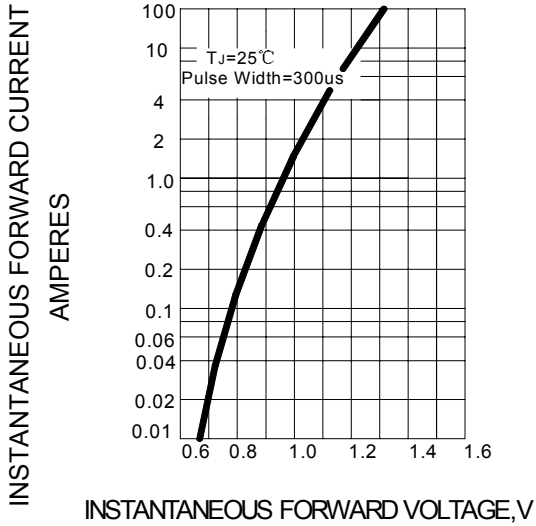


FIG.2 – TYPICAL JUNCTION CAPACITANCE

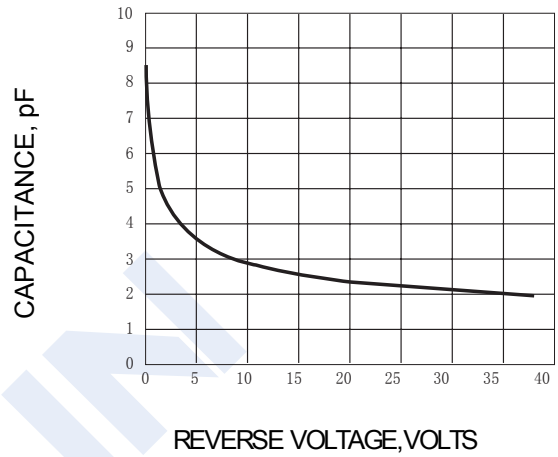


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

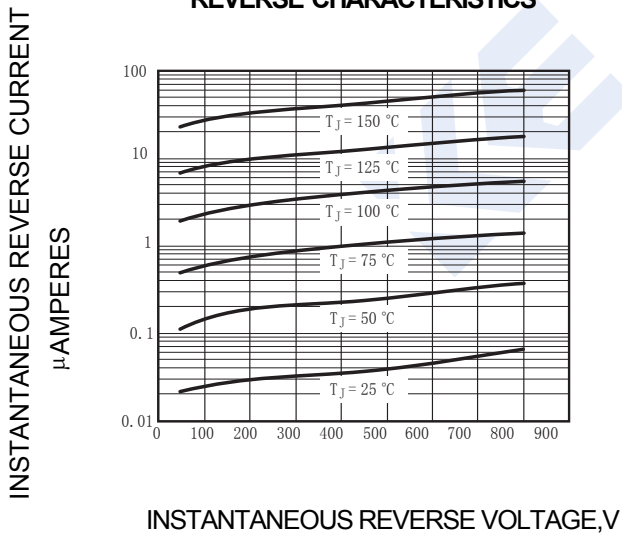


FIG.4 – FORWARD DERATING CURVE

