



TAYCHIPST

SMALL SURFACE MOUNT SUPER FAST DIODES

GS1001FL THRU GS1010FL

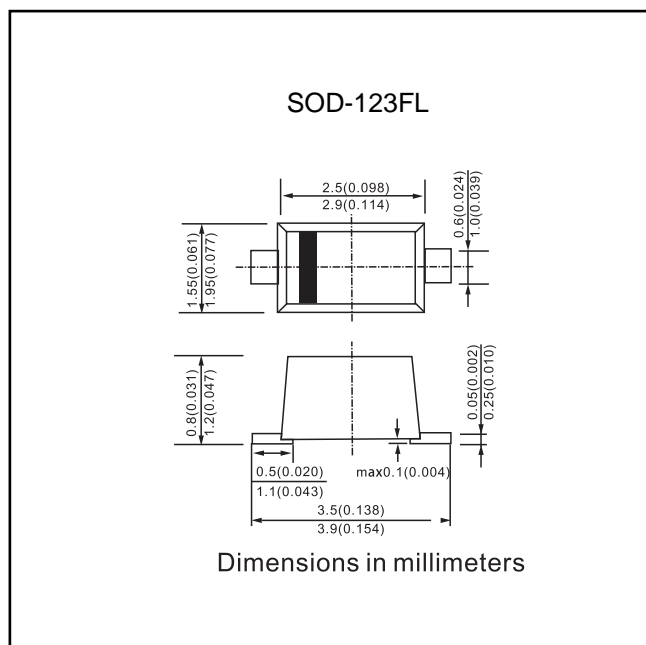
100V-1000V 1.0A

FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product : 99% Sn can meet RoHS environment substance directive request

MECHANICAL DATA

- Case: JEDEC SOD-123FL, Molded plastic over passivated junction.
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes positive end (cathode)
- standard Packaging : 8mm tape (EIA-481)
- Approx. Weight: 0.0168 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GS1000FL	GS1001FL	GS1002FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (Note 1)	$I_{F(AV)}$	1.0							A
Peak one cycle surge forward current (non-repetitive)	I_{FSM}	30 (60Hz)							A
Maximum Forward Voltage at 1.0A	V_F	1.1							V
Maximum DC Reverse Current at $T_J=25^\circ C$ Rated DC Blocking Voltage $T_J=125^\circ C$	I_R	1 50							μA
Typical Junction capacitance at 4V, MHz	C_J	4							pF

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GS1000FL	GS1001FL	GS1002FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	UNITS
Typical thermal resistance (Note 2)	R_{JA}	65							$^\circ C / W$
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150							$^\circ C$

NOTES:

- 1.Pulse test: 300u pulse width, 1% duty cycle.
- 2.Soldering land: 6mm x 6mm



TAYCHIPST

SMALL SURFACE MOUNT SUPER FAST DIODES

GS1001FL THRU GS1010FL

100V-1000V 1.0A

RATINGS AND CHARACTERISTIC CURVES

GS1001FL THRU GS1010FL

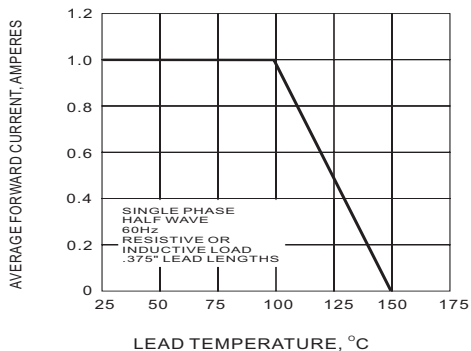


Fig.1 FORWARD CURRENT DERATING CURVE

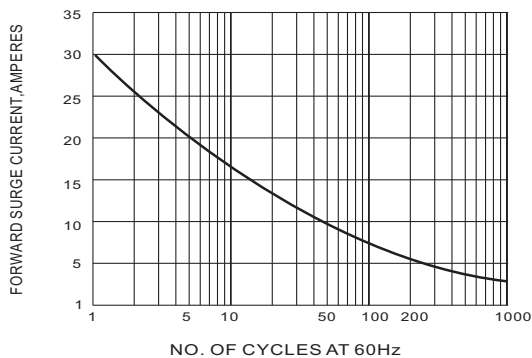


Fig.2 PEAK FORWARD SURGE CURRENT

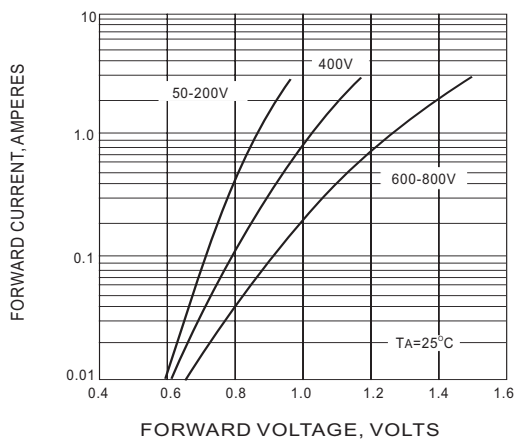


Fig.3 FORWARD CHARACTERISTICS

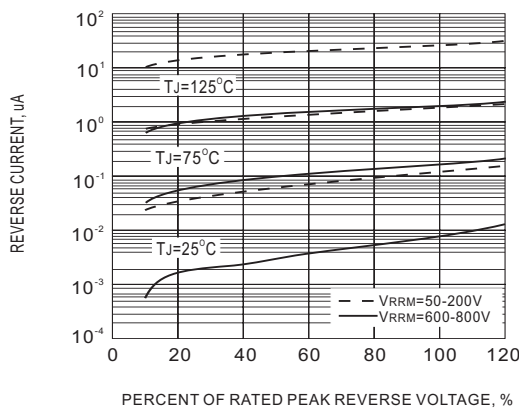


Fig.4 TYPICAL REVERSE CHARACTERISTICS

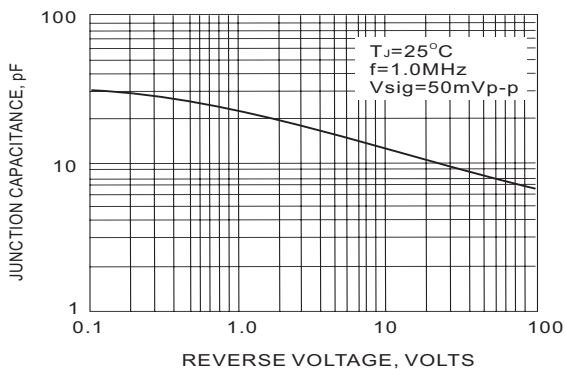


Fig.5 TYPICAL JUNCTION CAPACITANCE