

Surface Mount Rectifier

Reverse Voltage 1000 Volts Forward Current 1.0 Ampere

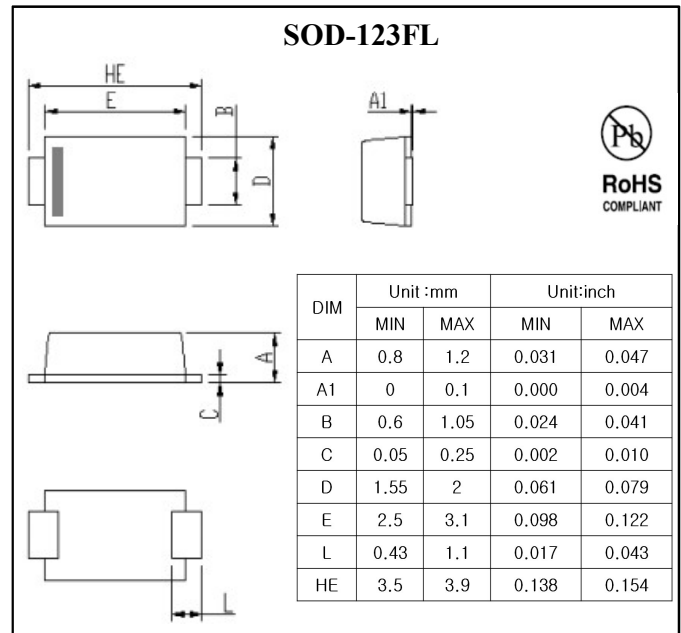
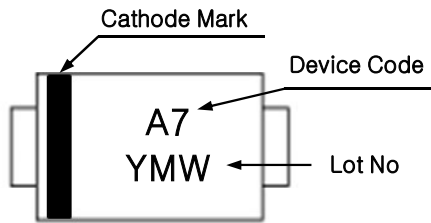
Features

- Glass passivated chip junction
- For surface mounted application
- Low forward voltage drop
- Low profile package
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed : 260°C/10 seconds

Mechanical Data

- Case : JEDEC SOD-123FL molded plastic over glass passivated chip
- Terminals : Solder plated, Solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.015gram

Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified
 Single phase half wave 60 HZ, resistive or inductive load
 For capacitive load, derate current by 20%

Parameter	Symbol	Rated Value	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V	
Maximum RMS Voltage	V_{RMS}	700	V	
Maximum DC Blocking Voltage	V_{DC}	1000	V	
Maximum Average Forward Rectified Current	$I_F(AV)$	1.0	A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30	A	
Maximum instantaneous forward voltage at 1.0A	V_F	1.1	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0	uA	Ta=25°C
		50	uA	Ta=100°C
Typical Thermal Resistance	Rth(j-a)	60	°C/W	
	Rth(j-l)	25		
Typical Junction Capacitance	C_J	15	pF	Note 1
Maximum Reverse Recovery Time	trr	2500	ns	Note 2
Operation Junction Temperature Range	T_J	-55 to +150	°C	
Storage Temperature Range	T_{STG}	-55 to +150	°C	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

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

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

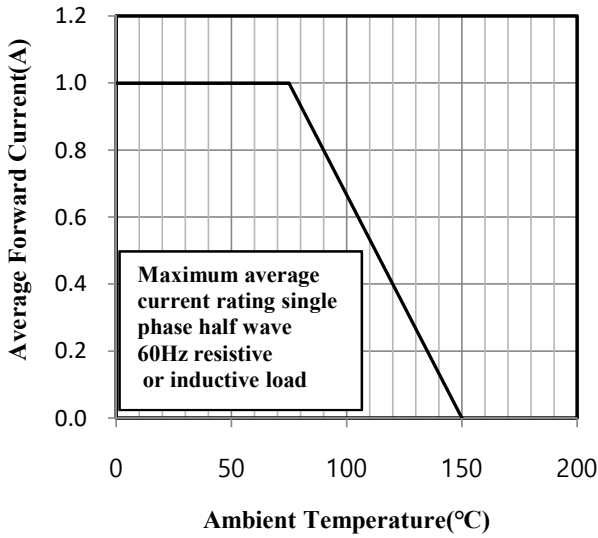


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

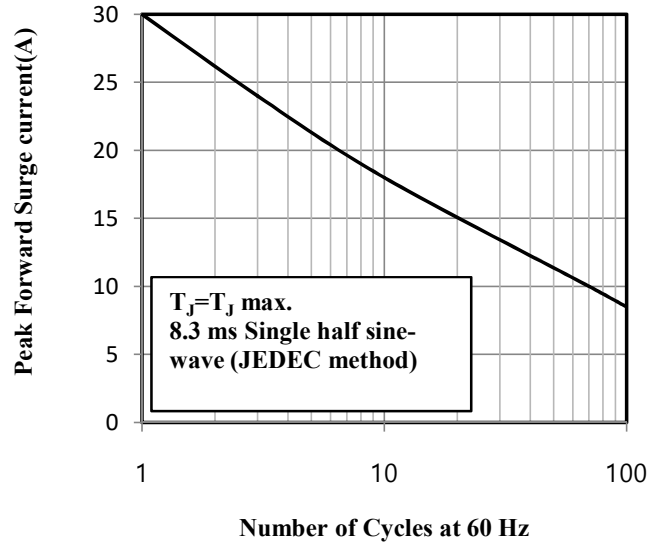


Fig.3 Typical Instantaneous Forward Characteristics

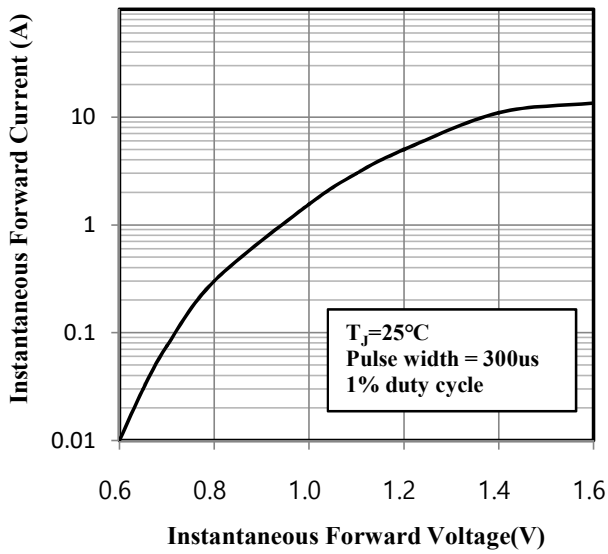


Fig.4 Typical Junction Capacitance

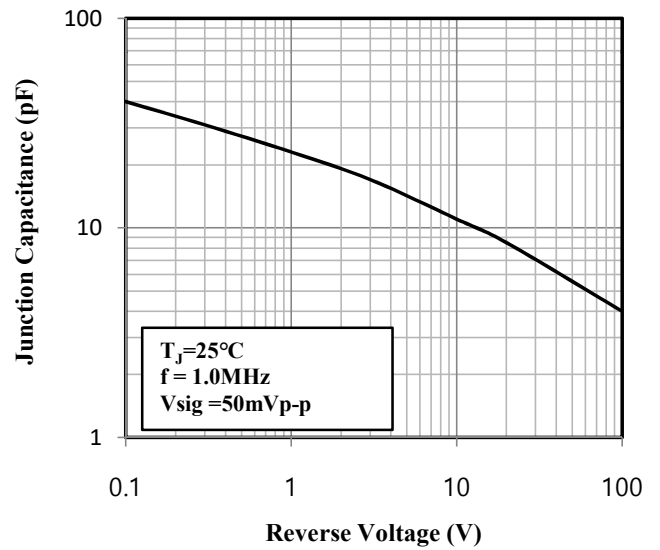


Fig.5 Typical Reverse Characteristics

