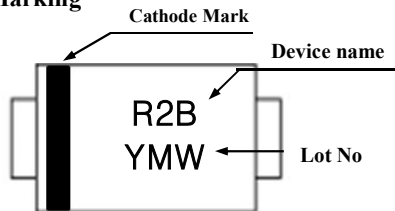
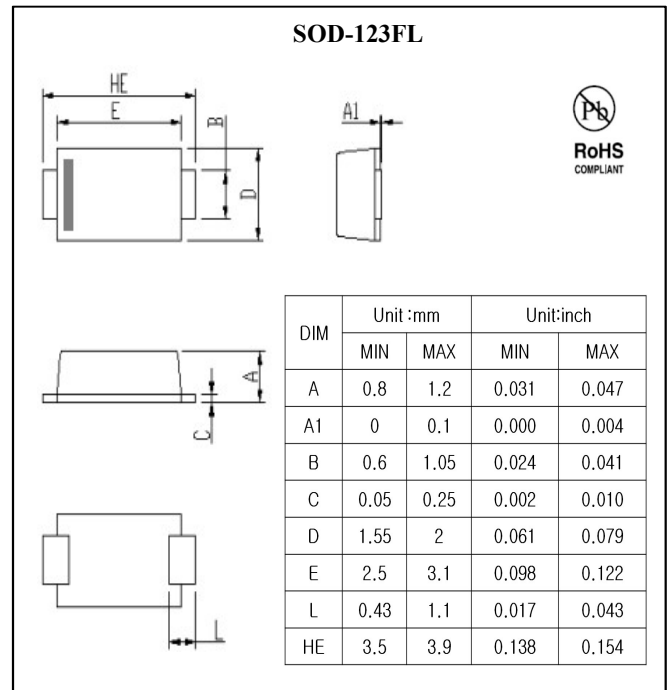


Small Surface Mount Fast Recovery Rectifiers
Reverse Voltage 100 to 1000 Volts, Forward Current 2.0 Ampere
Features

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std..(Halogen Free)

Mechanical Data

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

Marking

SOD-123FL

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	RS 2001FL	RS 2002FL	RS 2004FL	RS 2006FL	RS 2008FL	RS 2010FL	Unit	Remark
Marking Code		R2B	R2D	R2G	R2J	R2K	R2M		
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current	$I_F(AV)$	2.0						A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60						A	
Maximum Instantaneous Forward Voltage (@ $I_F=2A$)	V_F	1.3						V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0						uA	Ta=25°C
		50						uA	Ta=125°C
Typical Junction Capacitance	C_J	9						pF	Note 1
Reverse Recovery Time	trr	150		250		500		ns	Note 2
Typical Thermal Resistance	Rth(j-a)	180						°C /W	Note 3
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. Reverse Recovery Test Conditions : $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

Note 3. Thermal resistance from junction to ambient.

Ratings and Characteristics Curves ($T_a=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

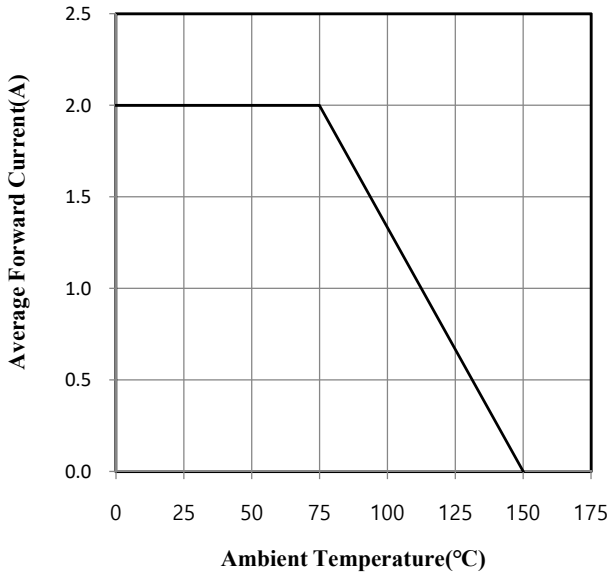


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

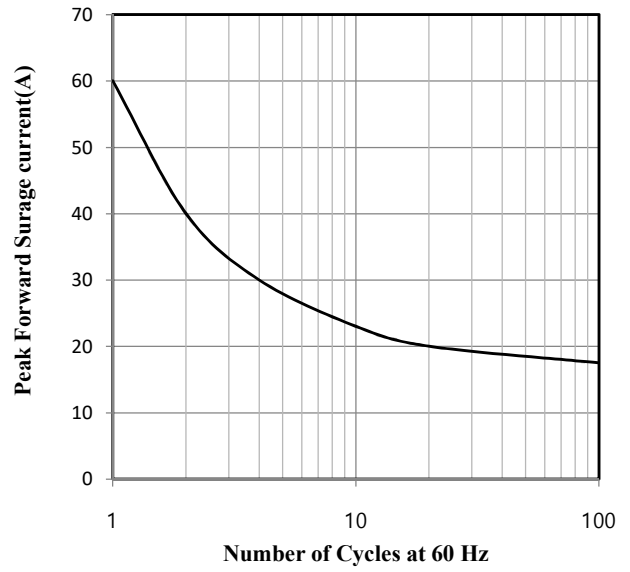


Fig.3 Typical Instantaneous Forward Characteristics

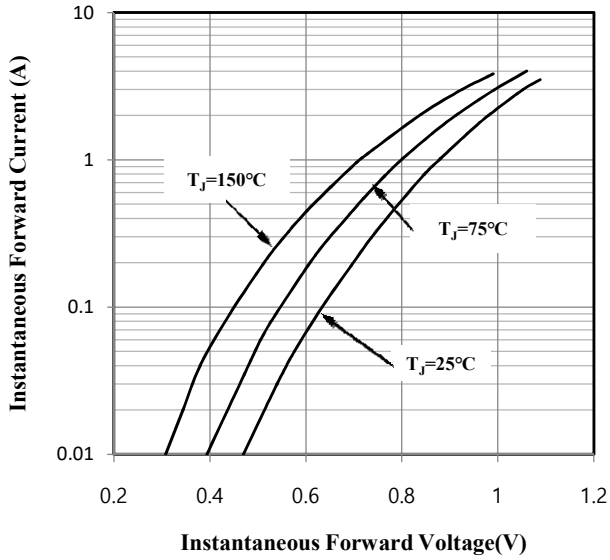


Fig.4 Typical Junction Capacitance

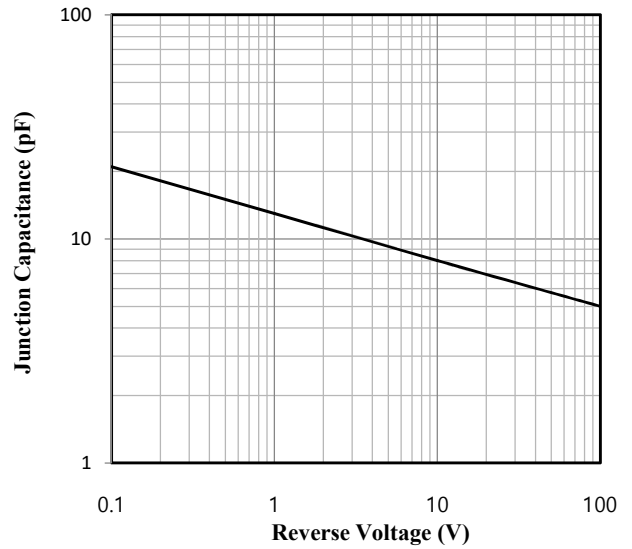


Fig.5 Typical Reverse Characteristics

