



# RS1001FL~RS1008FL

## SMALL SURFACE MOUNT FAST DIODES

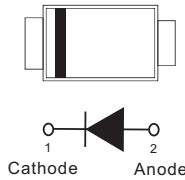
**VOLTAGE** 100 to 800 Volts    **CURRENT** 1.0 Amperes

### FEATURES

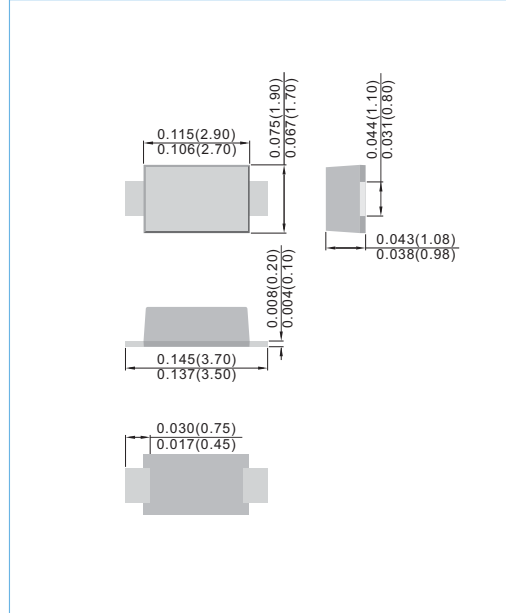
- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### 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)
- Apprx. Weight: 0.0006 ounces, 0.0173 grams
- Polarity : Color band cathode



**SOD-123FL**    Unit : inch(mm)



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Rating	Test condition	Symbol	RS1001FL	RS1002FL	RS1004FL	RS1006FL	RS1008FL	Units	
Marking Code		-	R1B	R1D	R1G	R1J	R1K	-	
Maximum repetitive peak reverse voltage		$V_{RRM}$	100	200	400	600	800	V	
Maximum RMS voltage		$V_{RMS}$	70	140	280	420	560	V	
Maximum DC blocking voltage		$V_{DC}$	100	200	400	600	800	V	
Maximum average forward rectified current Derate above $T_c=110^\circ\text{C}$		$I_{F(AV)}$	1.0						A
Maximum instantaneous forward voltage	0.7A 1.0A	$V_F$	1.15 1.3						V
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		$I_{FSM}$	30						A
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	1.0 50						$\mu\text{A}$
Typical capacitance	4V,1MHz	$C_J$	9						pF
Reverse recovery time	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{rr}=0.25\text{A}$	$t_{rr}$	150			250	500	nS	
Thermal resistance junction to ambient air		$R_{\theta JA}$	180						$^\circ\text{C/W}$
Operating junction and storage temperature range		$T_J, T_{STG}$	-55 to +150						$^\circ\text{C}$