

Surface Mount Schottky Rectifier

Features

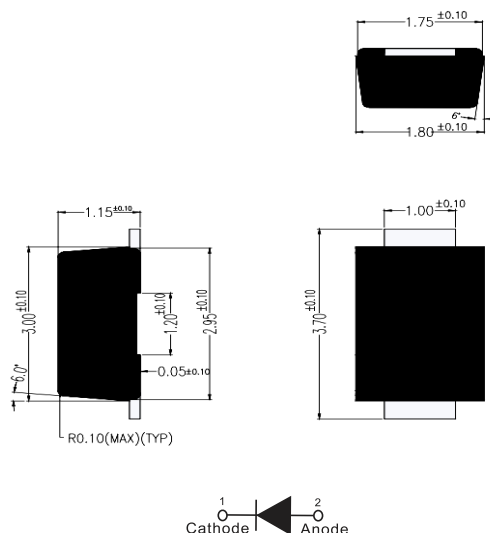
- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- AEC-Q101 qualified
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Mechanical Data

- Case: SOD-123FL
- Polarity: Indicated by cathode band
- Epoxy: UL 94V-0 rate flame retardant
- Mounting Position : Any

SOD-123FL

Unit : inch(mm)

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Unit	SS22FLQ	SS23FLQ	SS24FLQ	SS25FLQ	SS26FLQ	SS28FLQ	SS210FLQ	SS215FLQ	SS220FLQ
Repetitive peak reverse voltage	V_{RRM}	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, Resistance load, Ta (FIG.1)	I_O	A	2.0								
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, Tj=25℃	I_{FSM}	A	50								
Storage temperature	T_{stg}	℃	-55 ~+150								
Junction temperature	T_j	℃	-55 ~+150					-55 ~+175			

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Unit	Test Conditions	SS22FLQ	SS23FLQ	SS24FLQ	SS25FLQ	SS26FLQ	SS28FLQ	SS210FLQ	SS215FLQ	SS220FLQ
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	0.5			0.65		0.8		0.9	
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I _{RRM}	mA	T _a =25°C	0.50					0.10			
			T _a =100°C	10					5			

Thermal Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Unit	SS22FLQ	SS23FLQ	SS24FLQ	SS25FLQ	SS26FLQ	SS28FLQ	SS210FLQ	SS215FLQ	SS220FLQ
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	70 ⁽¹⁾								
	$R_{\theta J-L}$		20 ⁽¹⁾								

Note:

(1) Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm*3mm copper pad areas.

Characteristics (Typical)

FIG1: I_o - T_L Curve

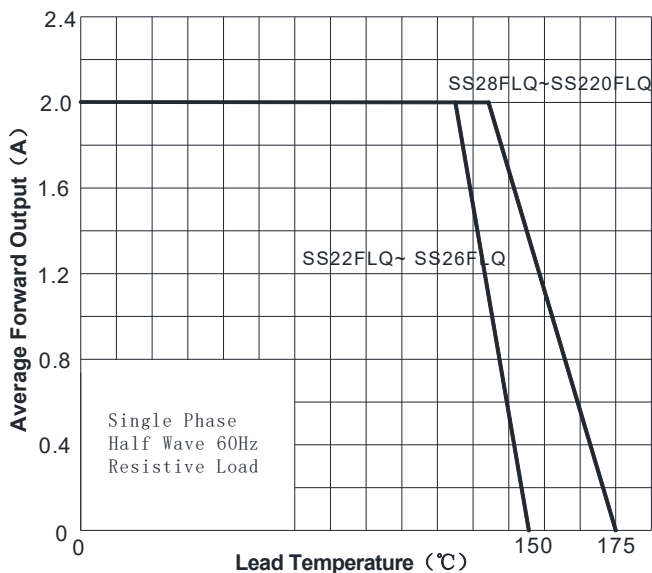


FIG2: Surge Forward Current Capability

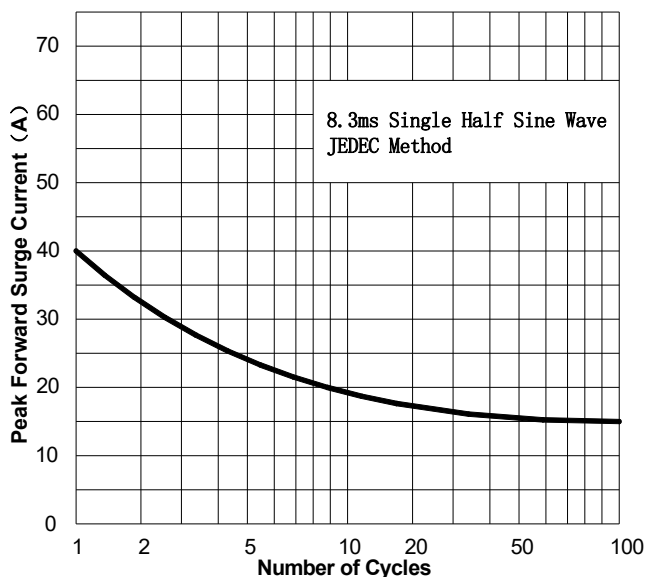


FIG3: Forward Voltage

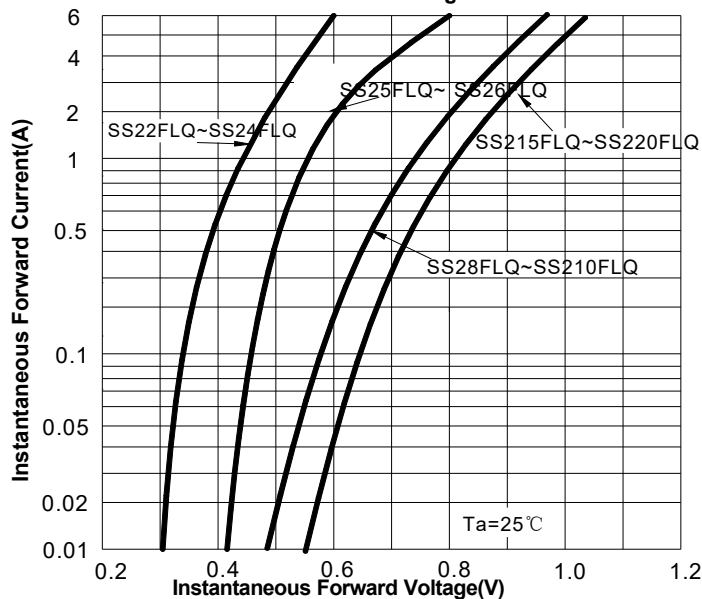


FIG4: Typical Reverse Characteristics

