

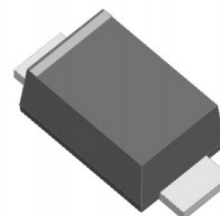
Surface Mount Schottky Barrier Rectifier 200V Current 2A

FEATURES AND BENEFITS

- Low power loss, high efficiency operation
- Low forward voltage drop
- Fast switching capability
- High forward surge capability
- Excellent High Temperature Stability

MECHANICAL DATA

- Epoxy: UL94 V-0 rated flame retardant
- Case: SOD123FL Package
- Terminals: Matte Tin annealed over copper
- Weight:



Primary Characteristic	
I_o	2A
V_{RRM}	200V
I_{FSM}	50A
V_F Typical=2A $T_J=125^\circ\text{C}$	0.80V
T_{Jmax}	150°C

Maximum Ratings (Ta=25°C unless otherwise specified)						
Characteristics			Symbol	Value		Unit
Peak Repetitive Reverse Voltage			V _{RRM}	200		V
Working Peak Reverse Voltage			V _{RWM}	200		V
DC Blocking Voltage			V _{DC}	200		V
RMS Reverse Voltage			V _{RMS}	140		V
Average Forward Rectified Current (per diode)			I _o	2		Amps
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)			I _{FSM}	50		Amps
Electrical Characteristics (Ta=25°C unless otherwise specified)						
Characteristics			Symbol	Typ.	Max.	Unit
Forward Voltage Drop ⁽¹⁾	IF=1A	Ta=25°C	V _F		0.80	V
	IF=2A	Ta=25°C	V _F	0.88	0.95	V
	IF=1A	Ta=125°C	V _F	0.76		V
	IF=2A	Ta=125°C	V _F	0.80		V
Reverse Current ⁽²⁾	VR=200V	Ta=25°C	I _R	0.5	10	μA
	VR=200V	Ta=125°C	I _R	1	5	mA

Notes (1): Pulse test: 300 μs pulse width, 1% duty cycle,

Notes (2): Pulse width $\leq 40\text{ms}$

THERMAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)			
Characteristics	Symbol	Value	Unit
Typical Thermal Resistance, junction to Lead	$R_{\theta JC}$	25	$^\circ\text{C/W}$
Operating Temperature Range (in DC Mode)	T_J	-65 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

Notes (3): FR-4 PCB, 2oz copper. Minimum recommended pad layout

RATINGS AND CHARACTERISTICS CURVES

Fig 1. Typical Forward Characteristics

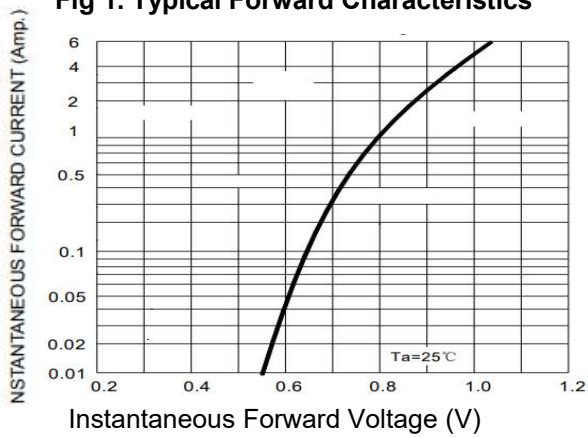


Fig 2. Typical Reverse Characteristics

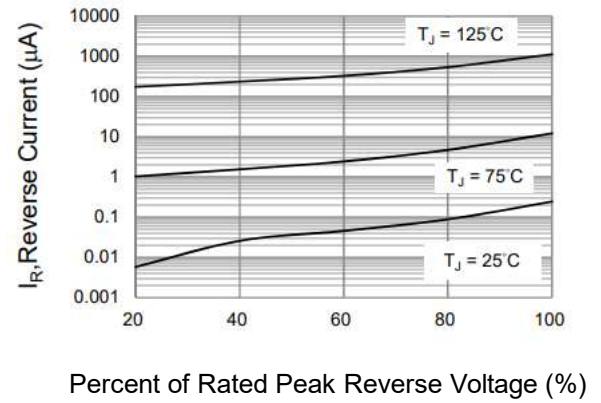


Fig 3. Forward Current Derating Curve

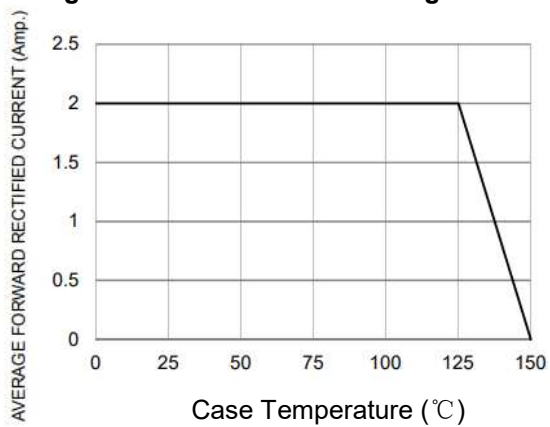
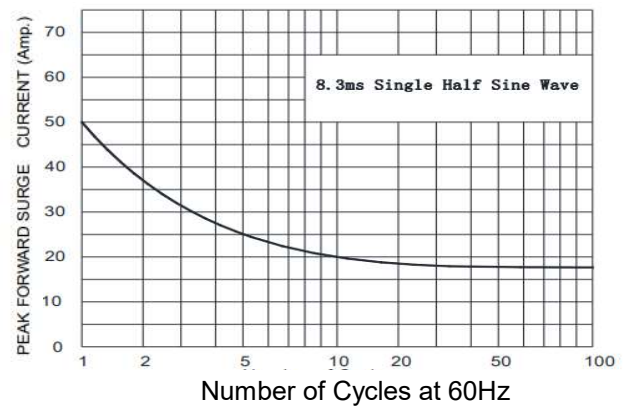
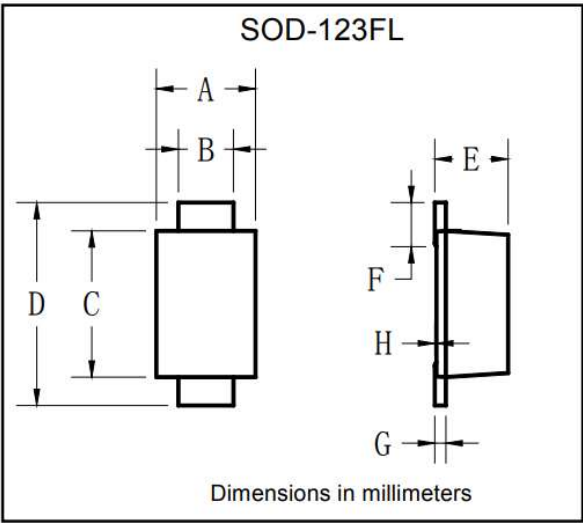


Fig 4. Non-repetitive Forward Surge Current



Package Outline Dimensions (in millimeters)

SOD-123FL		
Dim	Min	Max
A	1.38	1.95
B	0.50	1.10
C	2.50	2.90
D	3.50	3.90
E	0.80	1.33
F	0.25	0.90
G	0.10	0.25
H	0.02	0.05



Marking Information

