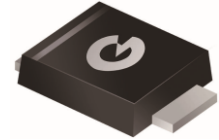


# Schottky Barrier Rectifier

## SL35BF - SL36BF

### Features

- Metal silicon junction, majority carrier conduction
- High forward surge current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C @ 10s
- Robust guarding for over voltage protection
- RoHS compliant with Halogen-free



### Mechanical Data

- Case: SMBF molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Matte tin plated leads; solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end

### Maximum Ratings (@ T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	SL35BF	SL36BF	Unit
Peak Repetitive Reverse Voltage	V <sub>R</sub> RM	50	60	V
RMS Reverse Voltage	V <sub>R</sub> MS	35	42	V
DC Blocking Voltage	V <sub>DC</sub>	50	60	V
Average Forward Output Current	I <sub>F</sub> AV	3.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I <sub>F</sub> SM	80		A

### Thermal Characteristics

Parameter	Symbol	SL35BF	SL36BF	Unit
Typical Thermal Resistance *1	R <sub>θ</sub> JA	65		°C/W
	R <sub>θ</sub> JC	16		
	R <sub>θ</sub> JL	15		
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +125		°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150		°C

Note \*1: Device mounted on p.c.b. with 10 mm x 20 mm x 0.1 mm copper pad area

# Schottky Barrier Rectifier

# SL35BF - SL36BF

## Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions		Typ.	Max.	Unit
Instantaneous Forward Voltage <sup>*1</sup>	$V_F$	$I_F = 3.0\text{A}$	@ $T_A = 25^\circ\text{C}$	-	0.58	V
Reverse Current <sup>*2</sup>	$I_R$	Rated $V_R$	@ $T_J = 25^\circ\text{C}$	-	500	$\mu\text{A}$
			@ $T_J = 100^\circ\text{C}$	-	40	mA

Note<sup>\*1</sup>: Pulse test: 300us pulse width, 1 % duty cycle

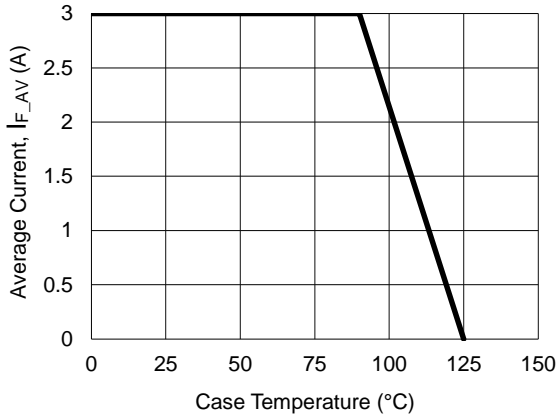
Note<sup>\*2</sup>: Pulse test: Pulse width 40ms

# Schottky Barrier Rectifier

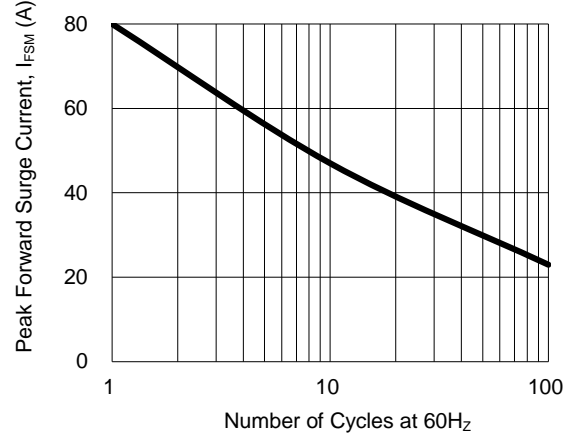
## SL35BF - SL36BF

### Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise noted)

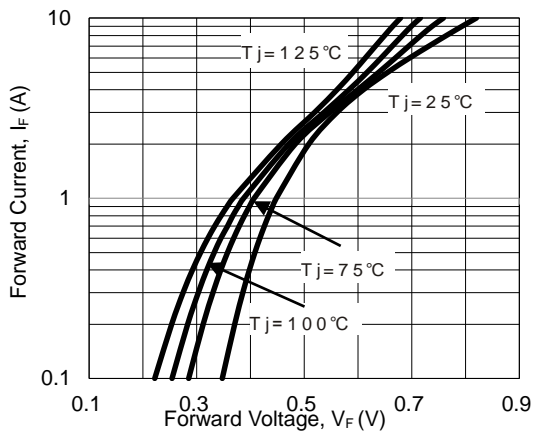
**Fig.1 Forward Current Derating Curve**



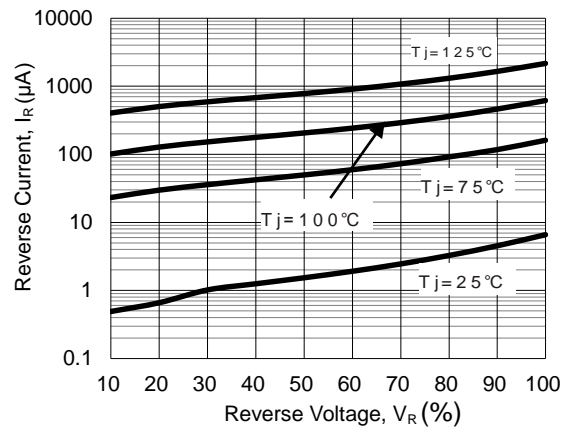
**Fig.2 Surge Current Derating Curve**



**Fig.3 Typical Forward Voltage Characteristics**



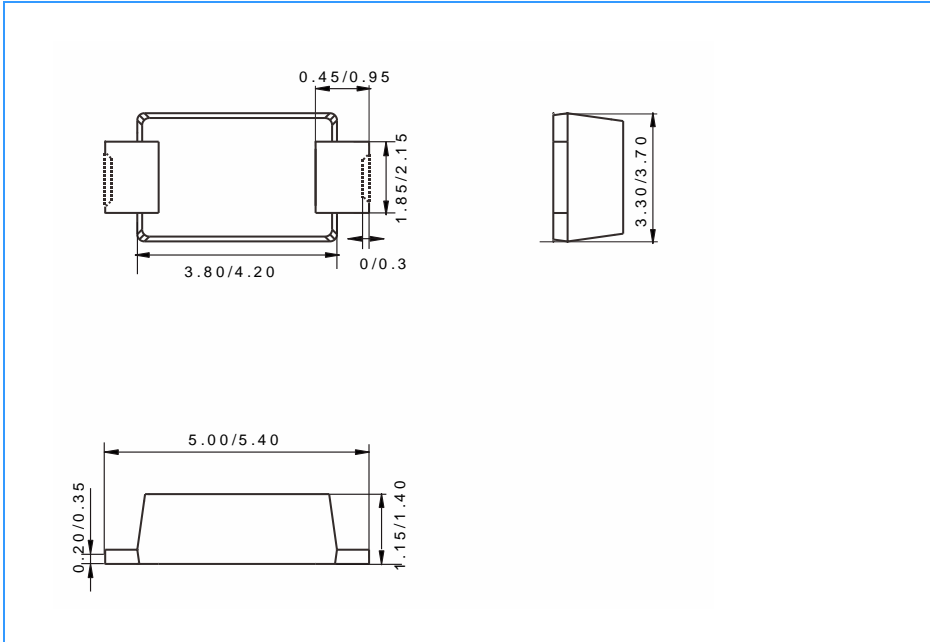
**Fig.4 Typical Reverse Characteristics**



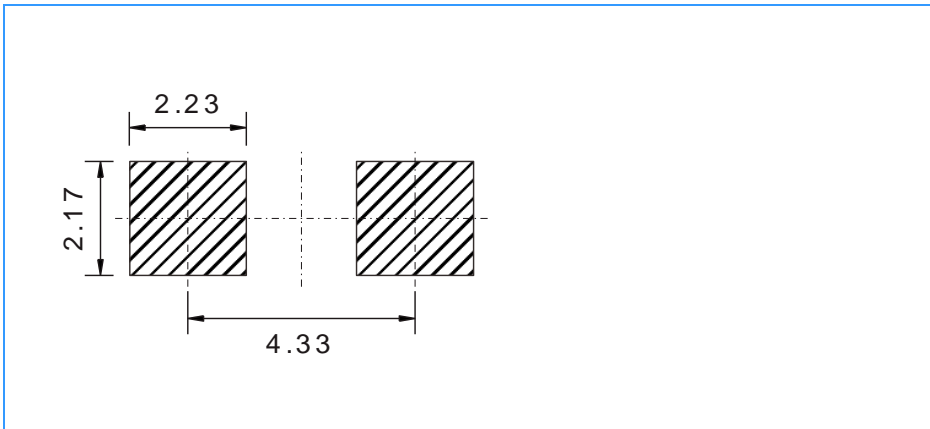
# Schottky Barrier Rectifier

# SL35BF - SL36BF

## Package Outline Dimensions (Unit: mm)



## Mounting Pad Layout (Unit: mm)



## Ordering Information

Part Number	Marking	Package	Shipping Quantity
SL35BF	SL35BF	SMBF	4000 pcs / Tape & Reel
SL36BF	SL36BF	SMBF	4000 pcs / Tape & Reel