

SMBF Plastic-Encapsulate Diodes

Low VF Schottky Rectifier Diodes

Features:

- $I_{F(AV)}$ 8A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications:

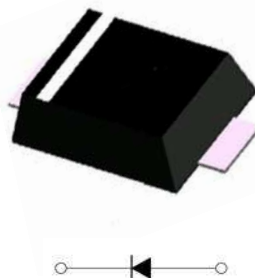
- Rectifier

Marking

- SS8XLF

X : From 2 To 20

SMBF



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KSS8								
				2LBF	3LBF	4LBF	5LBF	6LBF	8LBF	10LBF	15LBF	20LBF
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	80	100	150	200
Maximum RMS Voltage	V_{RMS}	V		14	21	28	35	42	56	70	105	140
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, TL(Fig.1)	8.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}C$	200								
Junction Temperature	T_J	$^{\circ}C$		-55~+150								
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150								

Electrical Characteristics ($T = 25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	KSS8								
				2LBF	3LBF	4LBF	5LBF	6LBF	8LBF	10LBF	15LBF	20LBF
Peak Forward Voltage	V_F	V	$I_F = 8.0A$	0.45		0.55		0.70		0.80		
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$		0.2						
	I_{RRM2}			$T_a=100^{\circ}C$		5.0						
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient	55								
	$R_{\theta J-L}$		Between junction and terminal	17								

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

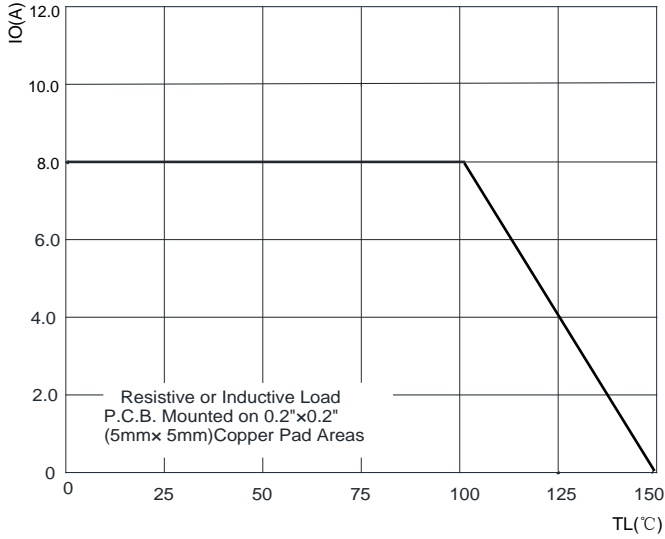


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

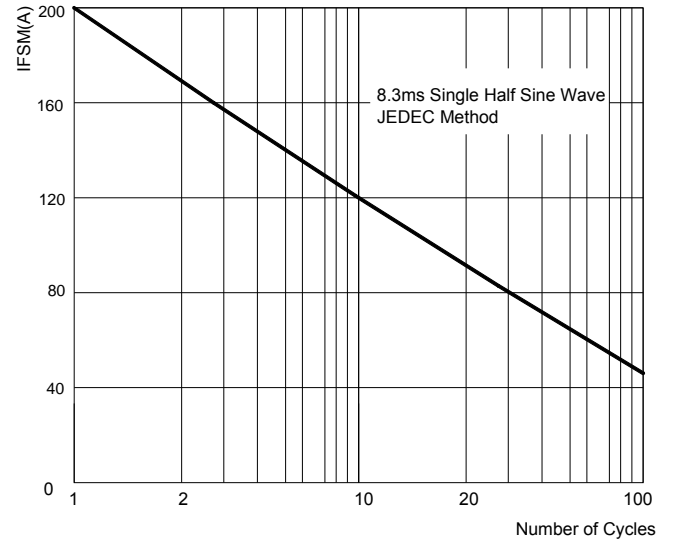


FIG.3: TYPICAL FORWARD CHARACTERISTICS

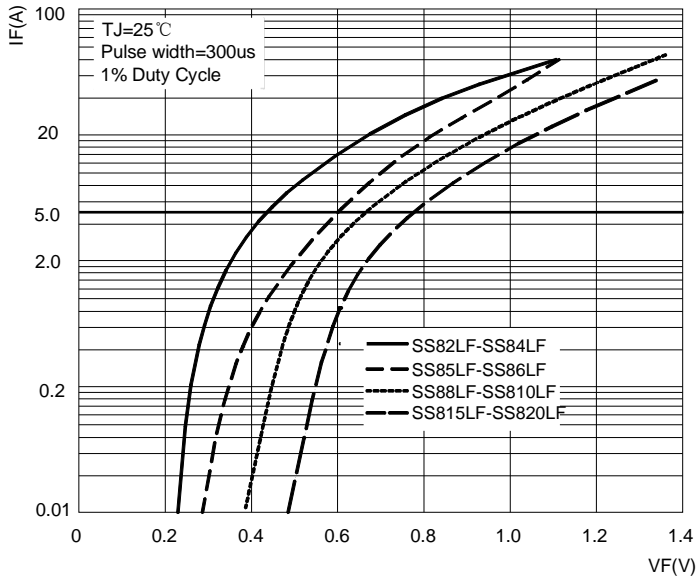
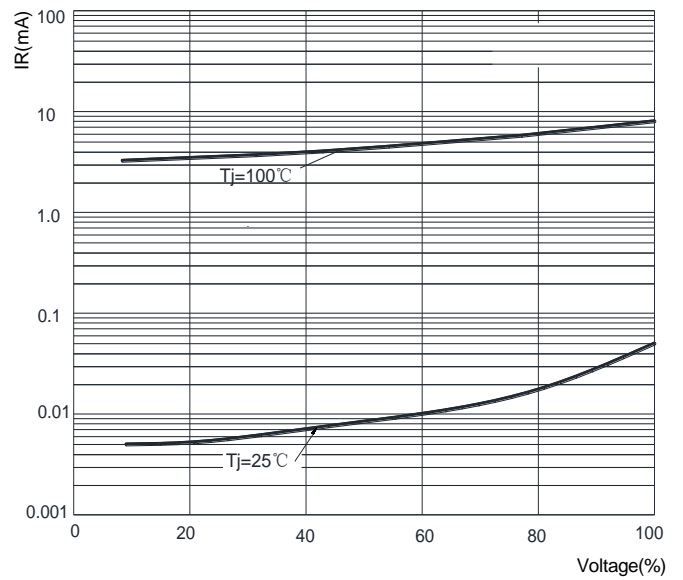
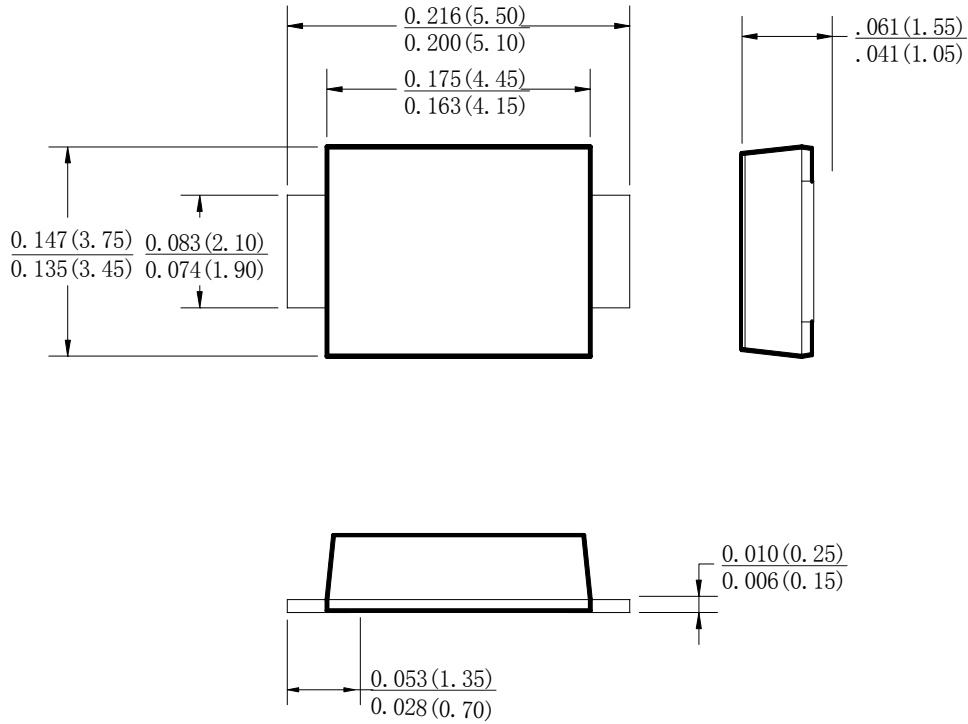


FIG.4: TYPICAL REVERSE CHARACTERISTICS

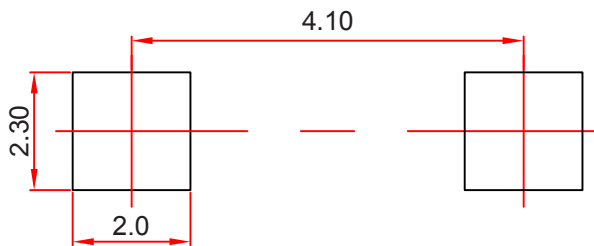


SMBF Package Outline Dimensions



Dimensions in inches and (millimeters)

SMBF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.