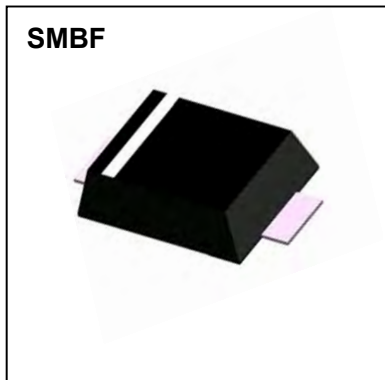


Surface Mount Fast Recovery Rectifier

RS5JBF~RS5MBF

SMBF



Cathode  Anode 

Features

- Low forward voltage drop
- Low leakage
- High current capability
- Super fast switching speed
- High forward surge capability
- High reliability.

Mechanical Data

- Epoxy: UL 94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting Position : Any

■Maximum Ratings (T_a=25°C Unless otherwise specified)

Parameter	Symbols	RS5JBF	RS5KBF	RS5MBF	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	600	800	1000	V
Maximum RMS voltage	VRMS	420	560	700	V
Maximum DC Blocking Voltage	VDC	600	800	1000	V
Maximum Average Forward Rectified Current	I(AV)	5.0			A
Reverse Recovery Time. IF=0.5A,IR=1A,IRR=0.25A	Trr	250	500		ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	150			A
I ² t rating for fusing (1ms< t < 8.3ms)	I ² t	186.7			A ² S
Maximum Forward Voltage at 5.0A and 25℃	VF	1.3			V
Maximum DC Reverse Current @TA=25℃ at Rated DC Blocking Voltage @TA=125℃	IR	2 200			μA
Typical Junction Capacitance (Note1)	Cj	70			pF
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150			℃
Typical thermal resistance (Note 2)	RθJ-C	78			℃/W

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

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

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

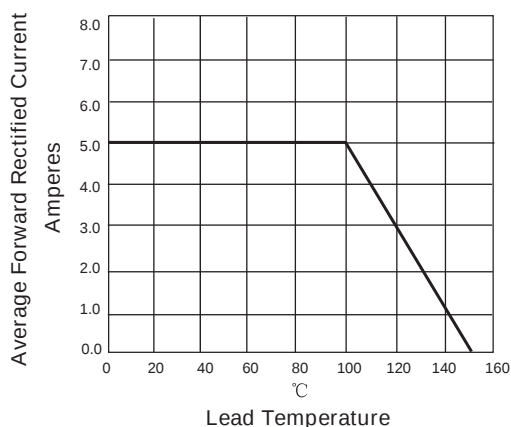


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

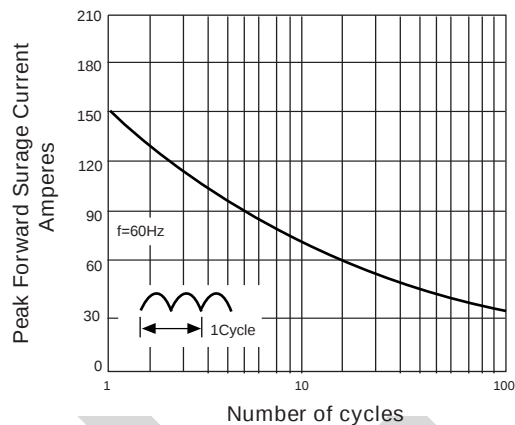


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

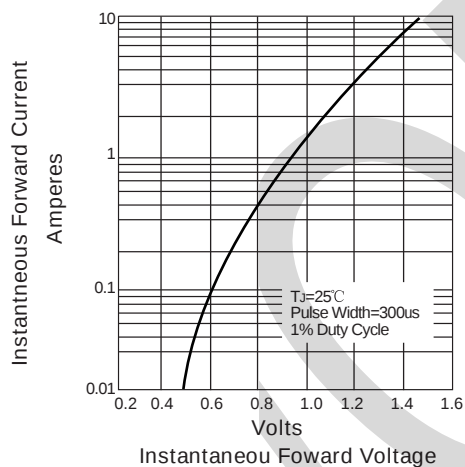
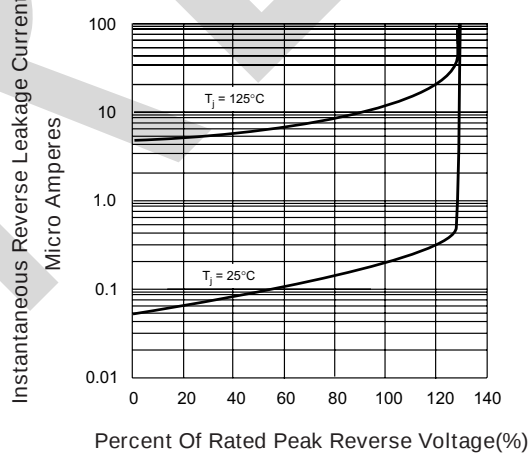
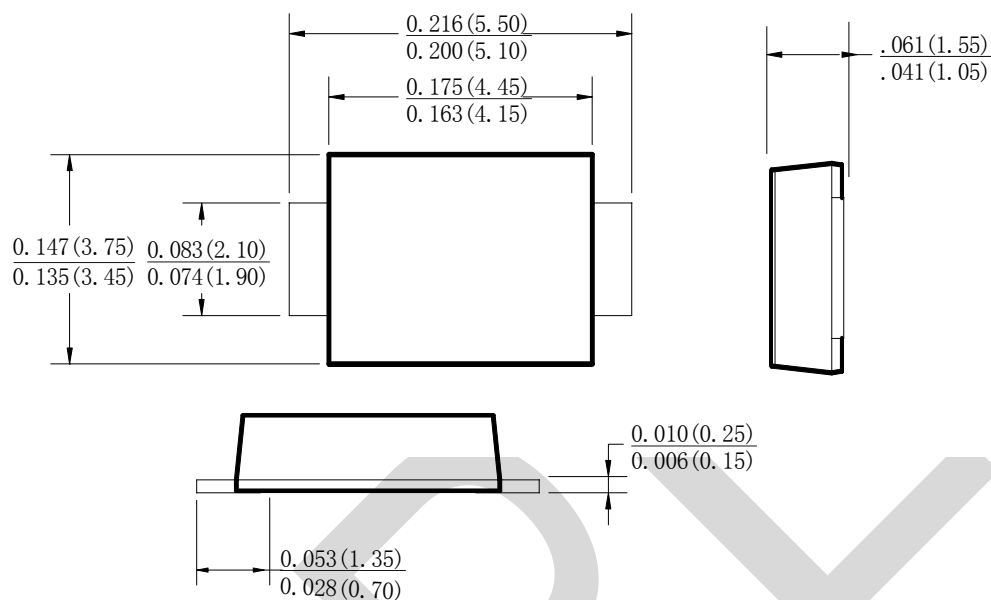


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



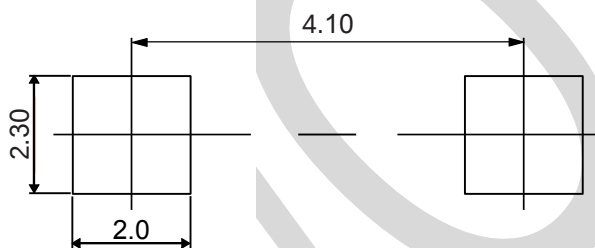
PACKAGE OUTLINE DIMENSIONS

SMBF dimension definitions



Dimensions in inches and (millimeters)

SMBF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Marking Information



① Product model : RS5JB~RS5MB

② PDC information:

Y X WW H

H: Halogen-free

WW: Week code (01 to 53)

X: Internal identification code

Y: Year code (ex: 0=2020)