

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss,high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage,high frequency inverters, free wheeling,and polarity protection applcations

Mechanical Data

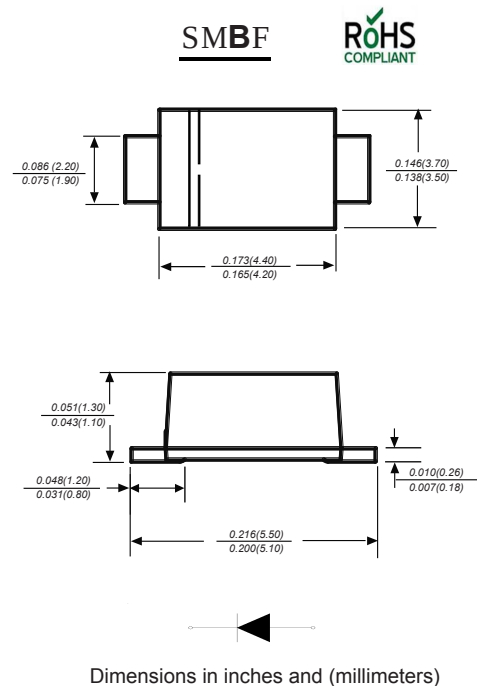
Case : JEDEC SMBF molded plastic body

Terminals : Solderable per MIL-STD-750,Method 2026

Polarity : Polarity symbol marking on body Mounting

Position : Any

Weight : 0.002 ounce, 0.057 grams



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter	SYMBOLS	SS22BF	SS23BF	SS24BF	SS25BF	SS26BF	SS28BF	SS210BF	SS215BF	SS220BF	UNITS
Marking Code											
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current at TL(see fig.1)	I _(AV)	2.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I _{FSM}	55					45				A
Maximum instantaneous forward voltage at 2.0A	V _F	0.55			0.70		0.85		0.95		V
Maximum DC reverse current T _A =25℃ at rated DCblocking voltage T _A =125℃	I _R	0.5					0.3				mA
		20.0					3.0				
Typical junction capacitance (NOTE 1)	C _J	250					110				pF
Typical thermal resistance (NOTE 2)	R _{θJA}	65.0									℃/W
Operating junction temperature range	T _J	-55 to +125									℃
Storage temperature range	T _{STG}	-55 to +150									℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

Typical Characteristics

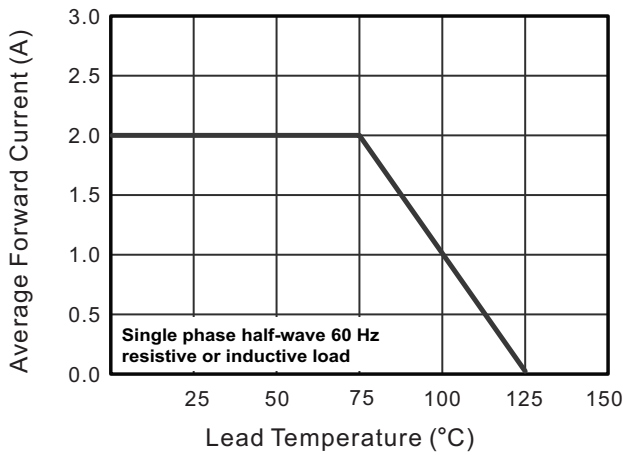


Fig.3 Typical Forward Characteristic

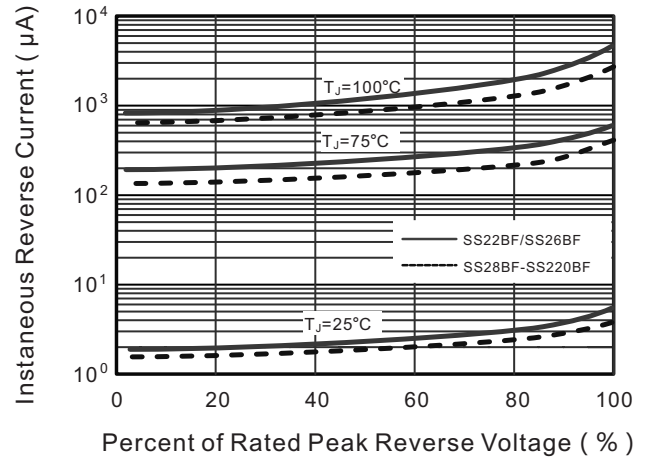


Fig.4 Typical Junction Capacitance

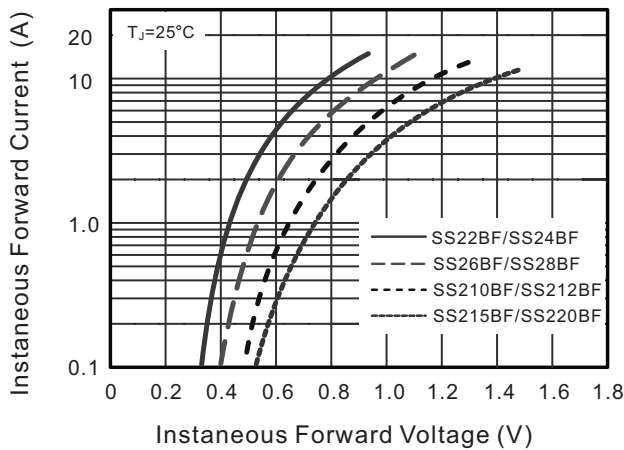


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

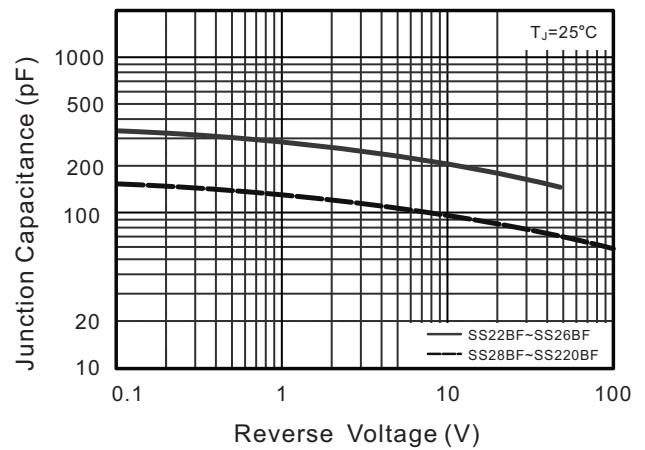
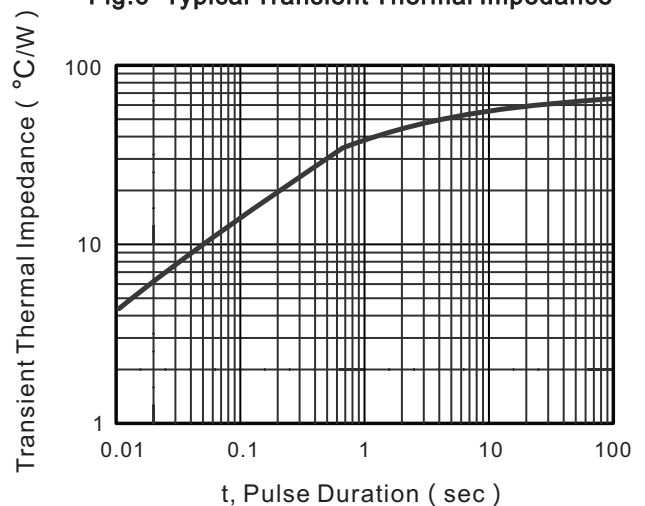
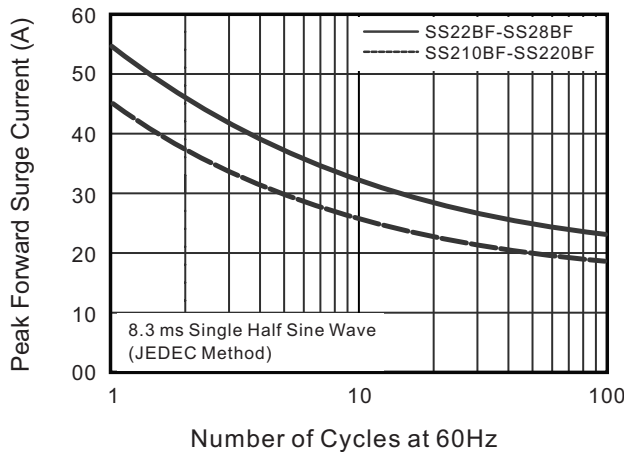


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.