



SEMICONDUCTOR

SS22BT THRU SS220BT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts

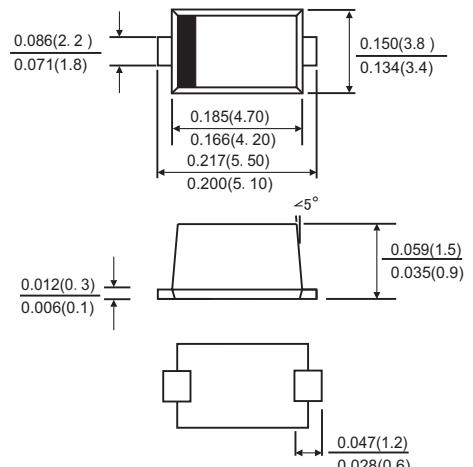
Forward Current - 2.0Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Built-in strain relief
- For surface mounted applications
- Low profile package
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling , and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



SMBF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: SMBF molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	SS 22BT	SS 23BT	SS 24BT	SS 26BT	SS 210BT	SS 215BT	SS 220BT	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	60	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	42	71	105	140	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current	I _(AV)					2.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}					50.0			Amps
Maximum instantaneous forward voltage at 2.0 A(Note 1)	V _F		0.55		0.70	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	I _R	100			20			µA
	T _A =100°C		5.0			-			mA
	T _A =125°C		-			3.0			
Typical thermal resistance(Note 2)	R _{θJA} R _{θJL}				70.0 25.0				°C/W
Operating junction temperature range	T _J				-55 to+150				°C
Storage temperature range	T _{STG}				-55 to+150				°C

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

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

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

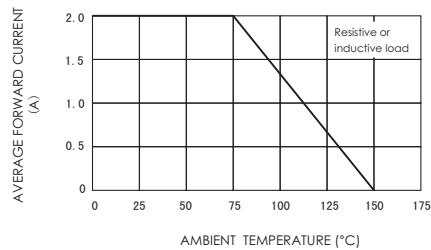


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

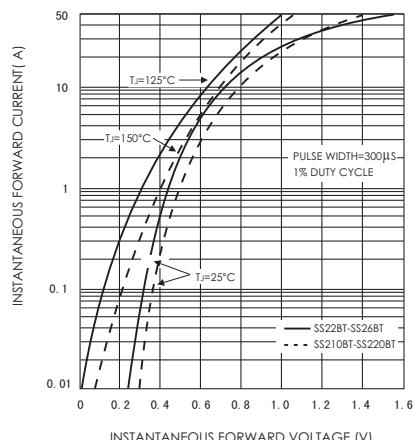


FIG.5-TYPICAL JUNCTION CAPACITANCE

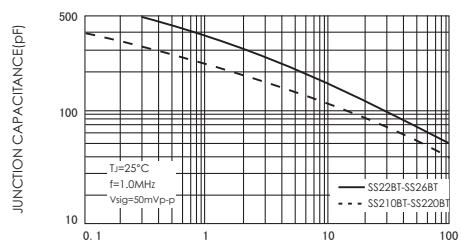


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

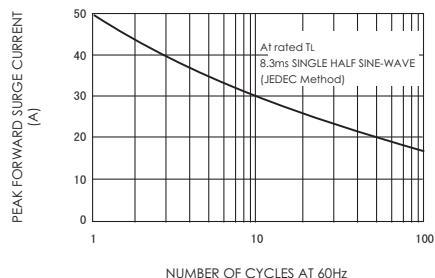


FIG.4-TYPICAL REVERSE CHARACTERISTICS

