

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 20--- 100V
CURRENT: 4.0 A

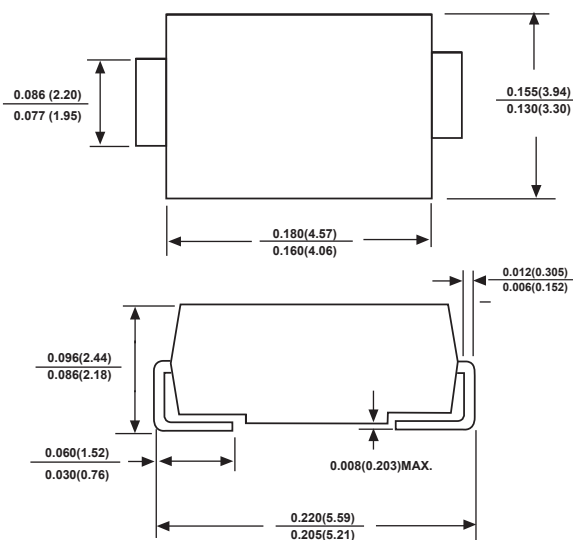
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- Metal silicon junction ,majority carrier conduction
- Built-in strain relief,ideal for automated placement
- For surface mounted applications
- Low power loss ,high efficiency,High surge capability
- High current capability ,Low forward voltage drop
- 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 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

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

SMB



MAXIMUM RATINGS AND CHARACTERISTICS

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

TYPE NUMBER		SYMBOL	SS42	SS43	SS44	SS45	SS46	SS48	SS410	UNITS
Maximum recurrent peak reverse voltage		V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage		V _{RMS}	14	21	28	35	42	57	71	V
Maximum DC blocking voltage		V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward rectified Current0.375"(9.5mm) lead length		I _{F(AV)}	4.0							A
Peak forw ard surge current 8.3ms single half sine-w ave superimposed on rated load		I _{FSM}	150.0							A
Maximum instantaneous forward voltage at 4.0 A(Note1)		V _F	0.45			0.50		0.6	0.6	V
Maximum reverse current	@T _A =25℃	I _R	1.5							mA
at rated DC blocking voltage per diode	@T _A =100℃		20.0		10.0					
Typical Thermal Resistance (Note 2)		R _{θJA} R _{θJL}	55.0 17.0							℃/W
Typical junction capacitance(Note 3)		C _J	500			400				pF
Storage Temperature		T _{STG}	- 65 ---- + 150							℃
Operation Junction Temperature		T _j	- 65 ---- + 125			- 65 ---- + 150				℃

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

2. P.C.B. mounted 0.55X0.55"(14X14mm) copper pad areas

3. Measured at 1MHz and reverse voltage of 4.0 volts