

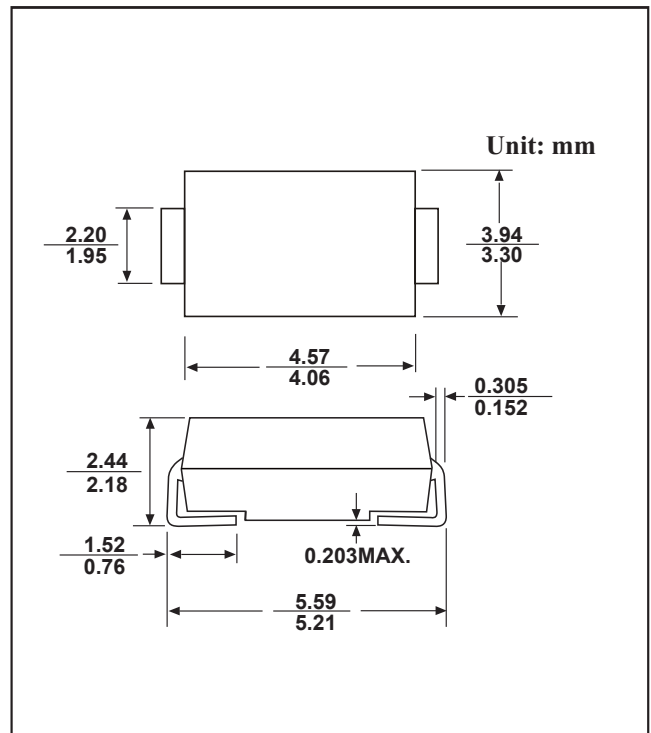
SMB PLASTIC SILICON RECTIFIERS

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- Metal silicon junction ,majority carrier conduction
- Built-in strain relief
- 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 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

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 Current 0.375"(9.5mm) lead length	$I_{F(AV)}$	4.0							A	
Peak forward surge current 8.3ms single half sine-wave 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 at rated DC blocking voltage per diode	@ $T_A=25^\circ C$	1.5							mA	
	@ $T_A=100^\circ C$	20.0		10.0						
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55.0							°C/W	
	$R_{\theta JL}$	17.0								
Typical junction capacitance(Note 3)	C_J	500			400				pF	
Storage Temperature	T_{STG}	- 55 ---- + 150								°C
Operation Junction Temperature	T_j	- 55 ---- + 125			- 55 ---- + 150					°C

Notes: 1. Pulse test: 300 μ s 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