

Schottky Barrier Rectifiers

Features

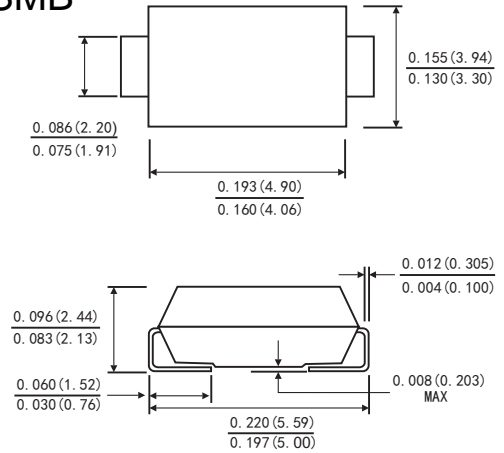
- Metal silicon junction, majority carrier conduction
- High surge capability
- High temperature soldering guaranteed:
260°C/10 seconds
- High current capability, low forward voltage drop
- Guarding for over voltage protection

- RoHS Compliant

Mechanical Data

- Case: SMC molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end

SMB



Maximum Ratings (@T_A = 25°C unless otherwise specified)

Characteristic	Symbol	SS10100B	Units
Peak repetitive reverse voltage	V _{RRM}	100	V
RMS reverse voltage	V _{RMS}	70	V
DC blocking voltage	V _{DC}	100	V
Maximum average forward output current	I _{F(AV)}	10	A
Peak forward surge current, 8.3ms single half-sine-wave	I _{FSM}	250	A

Thermal Characteristics

Parameter	Symbol	SS10100B	Units
Typical thermal resistance (Note 1)	R _{θJA}	48	°C /W
	R _{θJC}	20	
	R _{θJL}	10	
Operating junction temperature range	T _J	- 55 ---- + 150	°C
Storage temperature range	T _{STG}	- 55 ---- + 150	°C

Note:

1. Device mounted on PCB with 10 mm x 20 mm x 0.1mm copper pad areas

Electrical Characteristics (@T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test conditions		Typ.	Max.	Units
Maximum instantaneous forward voltage(Note 1)	V _F	I _F =10A	@T _A =25°C	--	0.85	V
Maximum Reverse current (Note 2)	I _R	Rated V _R ,	@T _J =25°C	--	250	μ A
			@T _J =100°C	--	10	m A

Note:

- 1.Pulse test: 300us pulse width, 1 % duty cycle
- 2.Pulse test: Pulse width 40ms