

SS10100

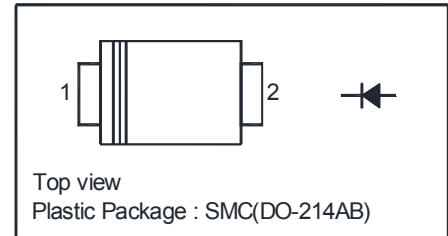
Surface Mount Schottky Barrier Rectifier Reverse Voltage - 100 V Forward Current - 10 A

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 applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Mechanical Data

- **Case:** SMC(DO-214AB)
- **Terminals:** Solderable per MIL-STD-750, Method 2026

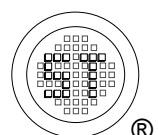
Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	Symbols	Value	Units
	Marking	S1010	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	175	A
Maximum Forward Voltage at 10 A	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.05 10	mA
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	47	°C/W
Operating Junction Temperature Range	T_j	- 55 to + 150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

¹⁾ Thermal resistance from junction to ambient , PCB mounted.



Electrical Characteristic Curves

Fig.1 Forward Current Derating Curve

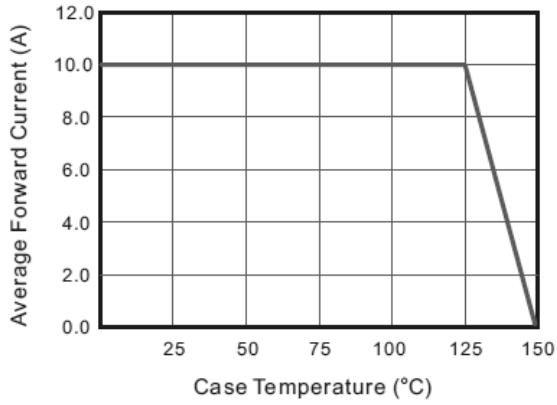


Fig.2 Typical Reverse Characteristics

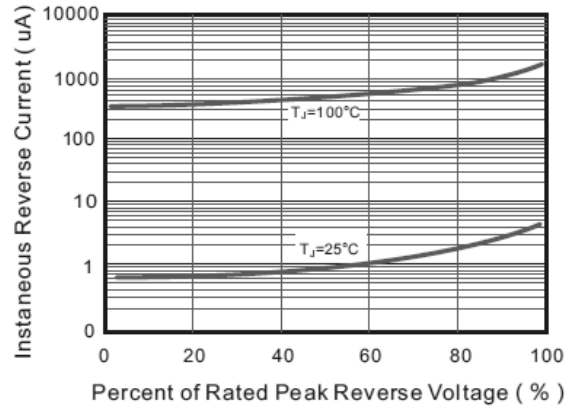


Fig.3 Typical Forward Characteristic

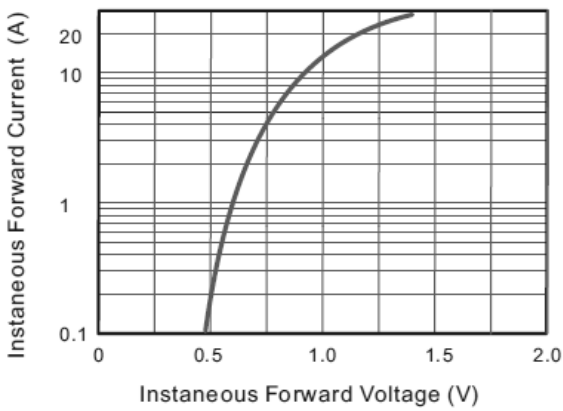


Fig.4- Typical Transient Thermal Impedance

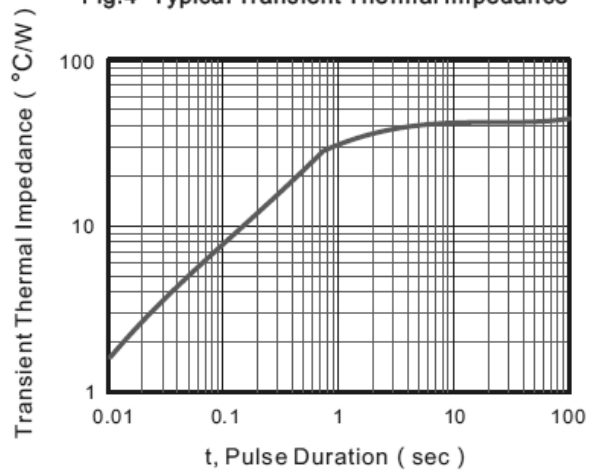
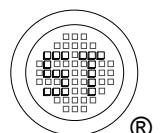
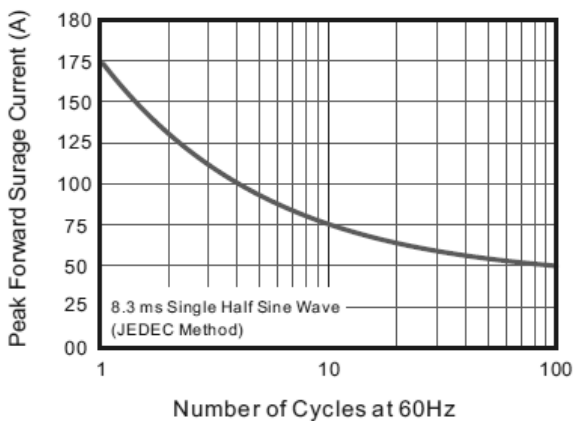


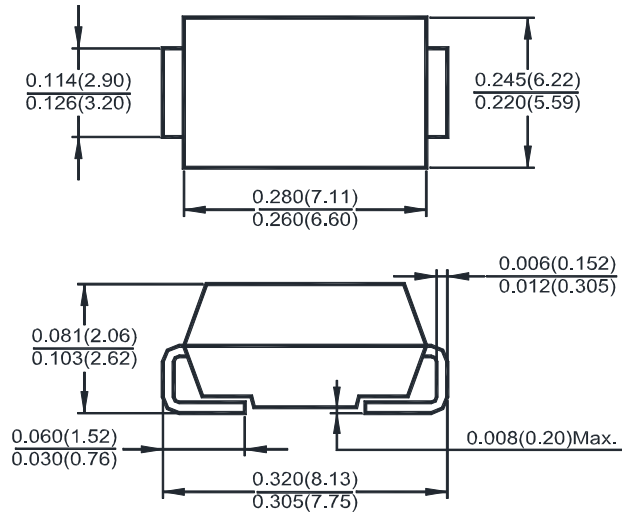
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



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Package Outline Dimensions in inches (millimeters)

SMC(DO-214AB)



Marking information

" S1010 " = Part No.

" III " = Cathode line

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