

# SK520C

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 200 V

Forward Current - 5 A

### Features

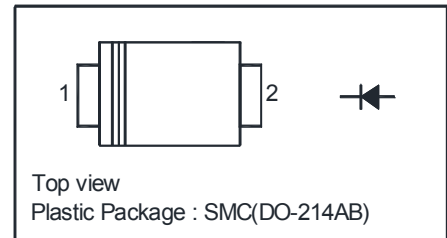
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

### Mechanical Data

- **Case:** JEDEC SMC(DO-214AB) molded plastic body
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



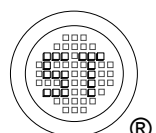
### Maximum Ratings and Electrical Characteristics

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	Unit
	Marking	SK520C	-
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage at 5 A	$V_F$	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	1 50	mA
		$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	
Typical junction capacitance <sup>1)</sup>	$C_J$	400	pF
Thermal Resistance, Junction to Ambient <sup>2)</sup>	$R_{\theta JA}$	35	°C/W
Operating Temperature Range	$T_J$	- 55 to + 125	°C
Storage Temperature Range	$T_{stg}$	- 55 to + 150	°C

<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C.

<sup>2)</sup> P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



## Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

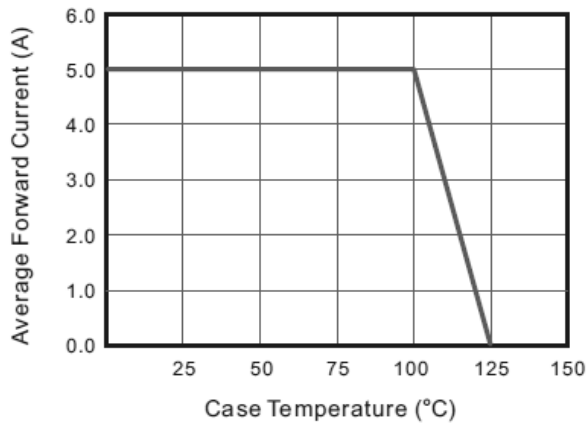


Fig.2 Typical Reverse Characteristics

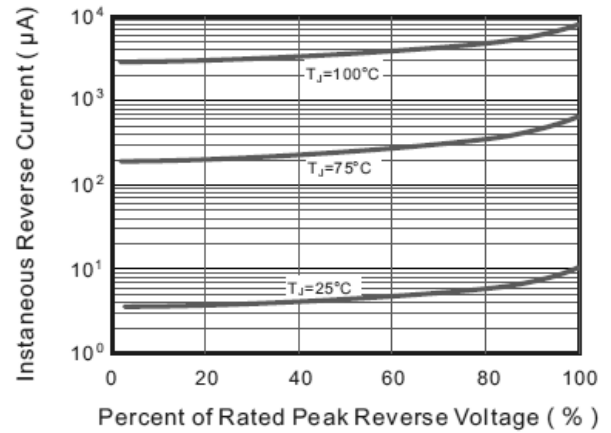


Fig.3 Typical Forward Characteristic

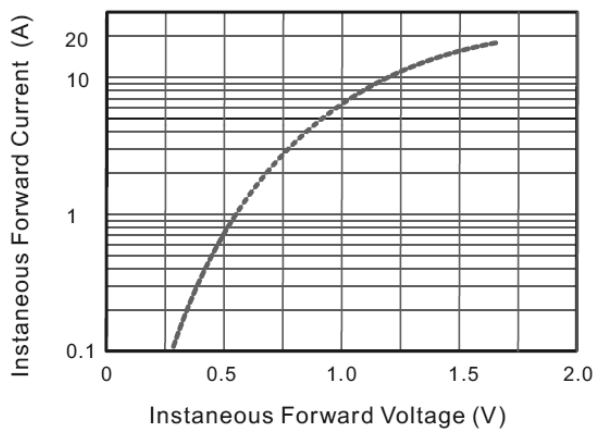


Fig.4 Typical Junction Capacitance

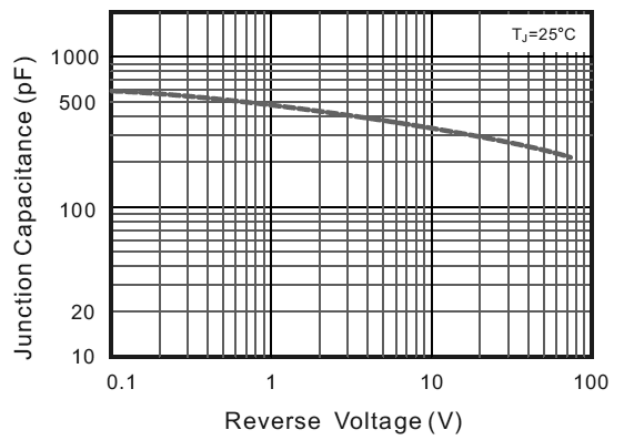


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

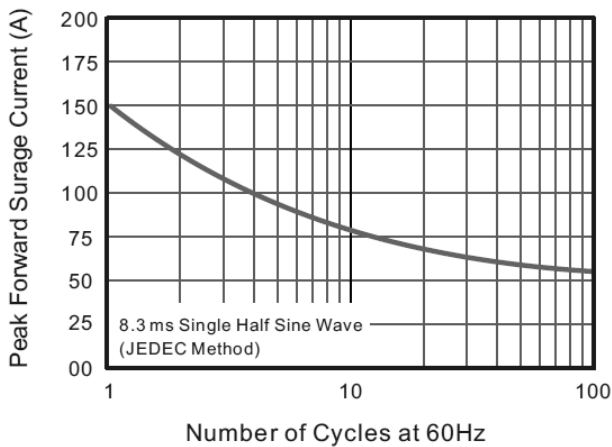
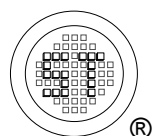
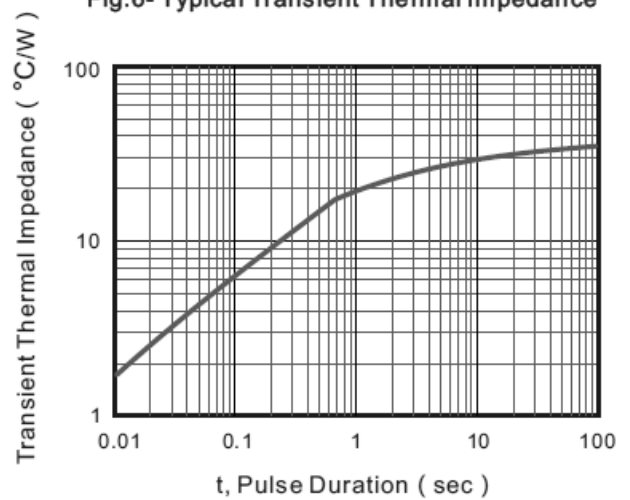


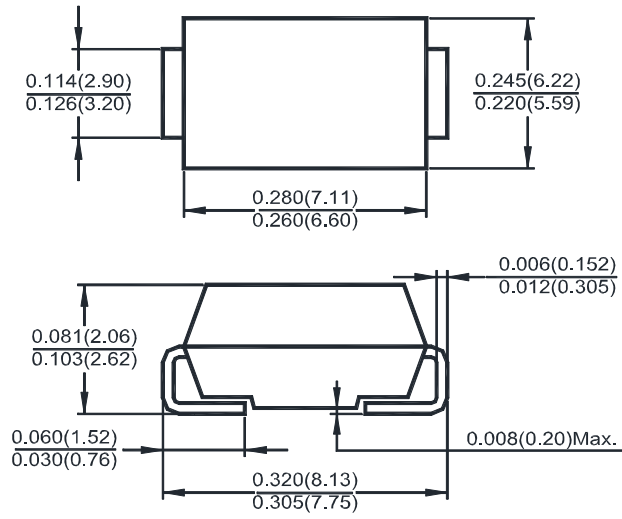
Fig.6- Typical Transient Thermal Impedance



# SK520C

Package Outline Dimensions in inches (millimeters)

SMC(DO-214AB)



## Marking information

" SK520C " = Part No.

" III " = Cathode line

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