

# S10KC-AU / S10MC-AU

## Surface Mount Rectifier

**Voltage**

**800~1000 V**

**Current**

**10A**

**SMC / DO-214AB**

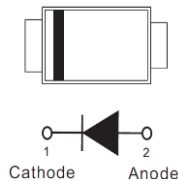
Unit : inch(mm)

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Easy pick and place
- Glass passivated junction
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case : SMC Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.2325 grams



### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	S10KC-AU	S10MC-AU	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	560	700	V
Maximum DC blocking voltage	V <sub>R</sub>	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	10		A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	300		A
Maximum forward voltage at 10A	V <sub>F</sub>	1.1		V
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	10		uA
Typical junction capacitance Measured at 1MHz and applied V <sub>R</sub> =4V	C <sub>J</sub>	65		pF
Typical thermal resistance	(Note 2) R <sub>θJA</sub>	168		°C/W
	(Note 1) R <sub>θJL</sub>	24		
	(Note 1) R <sub>θJC</sub>	29		
Operating junction temperature range	T <sub>J</sub>	-55 to +150		°C
Storage temperature range	T <sub>STG</sub>	-55 to +150		°C

Note : 1. Mounted on a 100mm x 100mm x 1.6mm copper pad area.

2. Mounted on a FR4 PCB, single-sided copper, mini pad.

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## TYPICAL CHARACTERISTIC CURVES

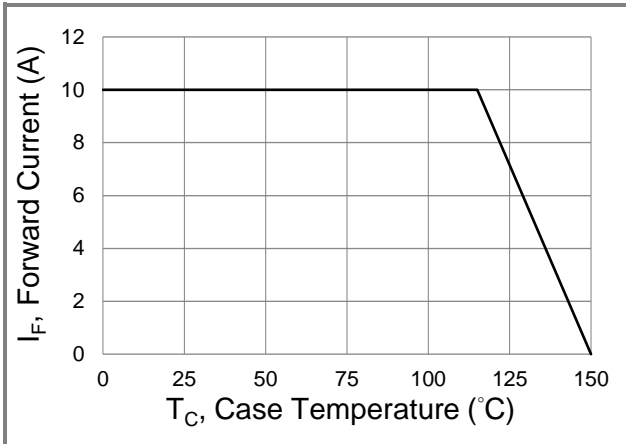


Fig.1 Forward Current Derating Curve

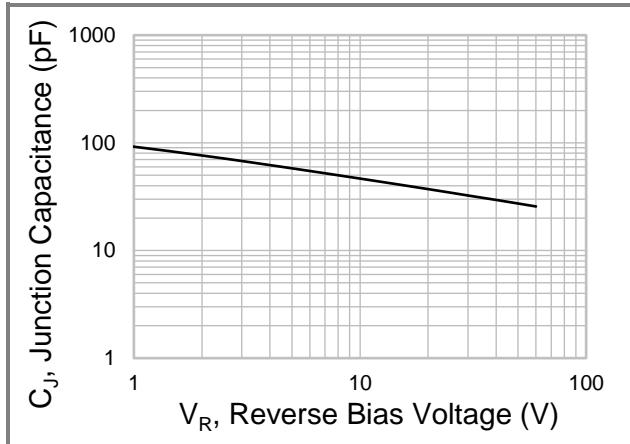


Fig.2 Typical Junction Capacitance

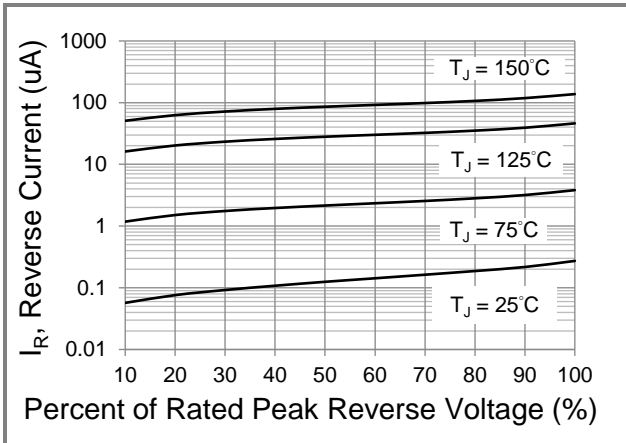


Fig.3 Typical Reverse Characteristics

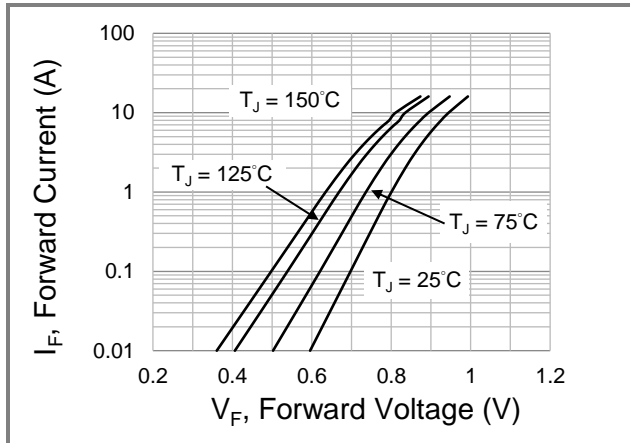


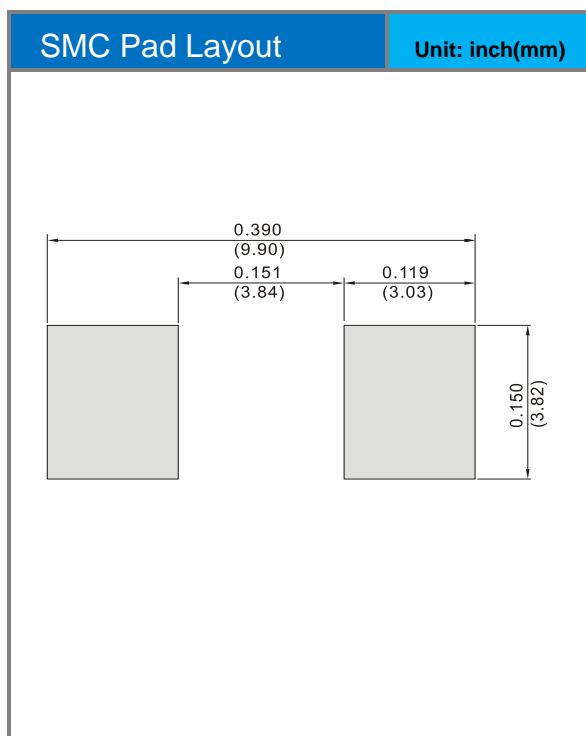
Fig.4 Typical Forward Characteristics

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## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
S10KC-AU	SMC	0.8K pcs / 7" reel	S10KC
S10MC-AU	SMC	0.8K pcs / 7" reel	S10MC

## Mounting Pad Layout



## S10KC-AU / S10MC-AU

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