

S10KC / S10MC

Surface Mount Rectifier

Voltage	800~1000 V	Current	10A
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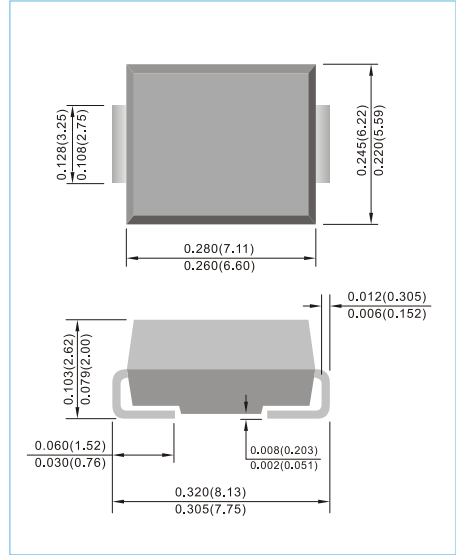
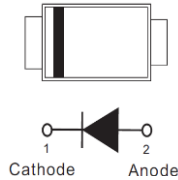
SMC / DO-214AB Unit : inch(mm)

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
- 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_A=25°C unless otherwise noted)

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

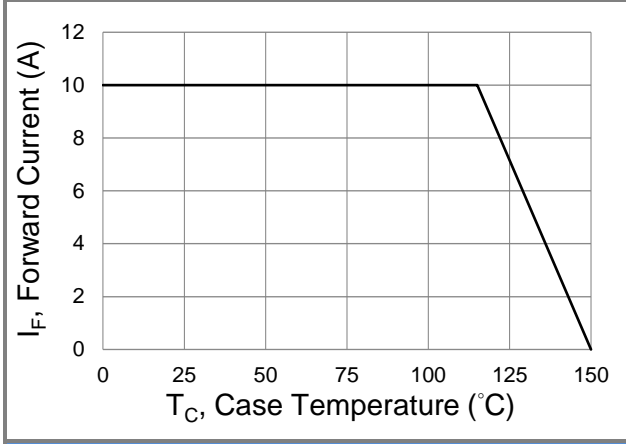


Fig.1 Forward Current Derating Curve

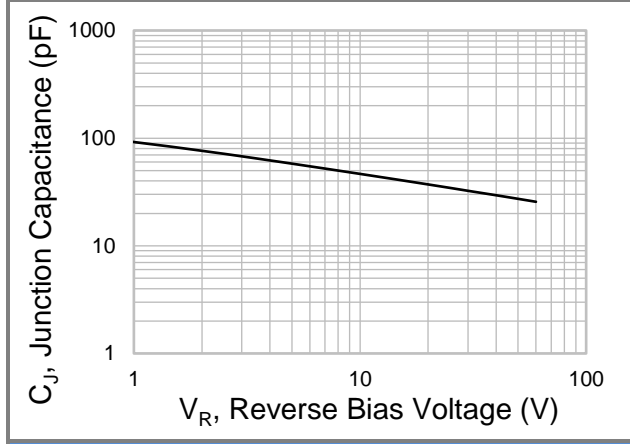


Fig.2 Typical Junction Capacitance

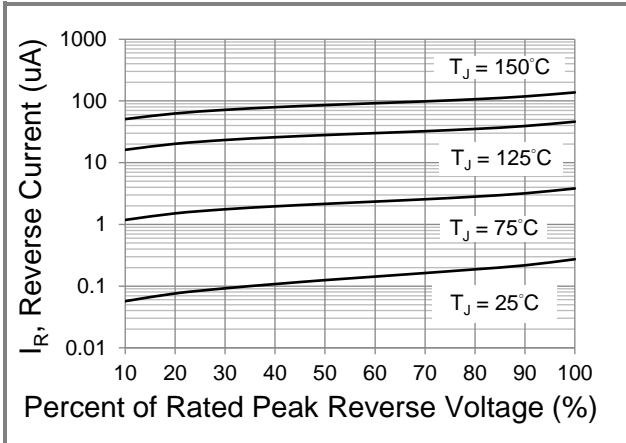


Fig.3 Typical Reverse Characteristics

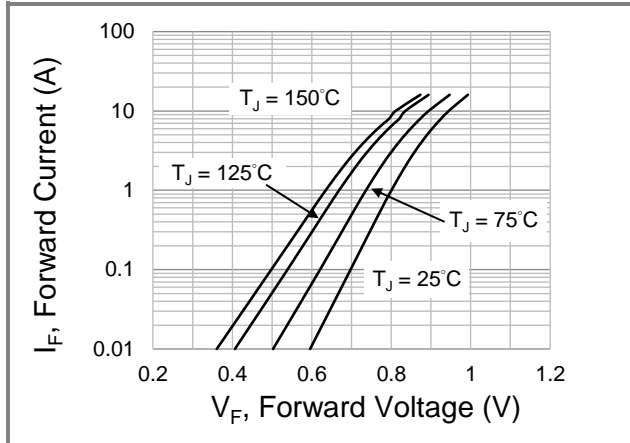


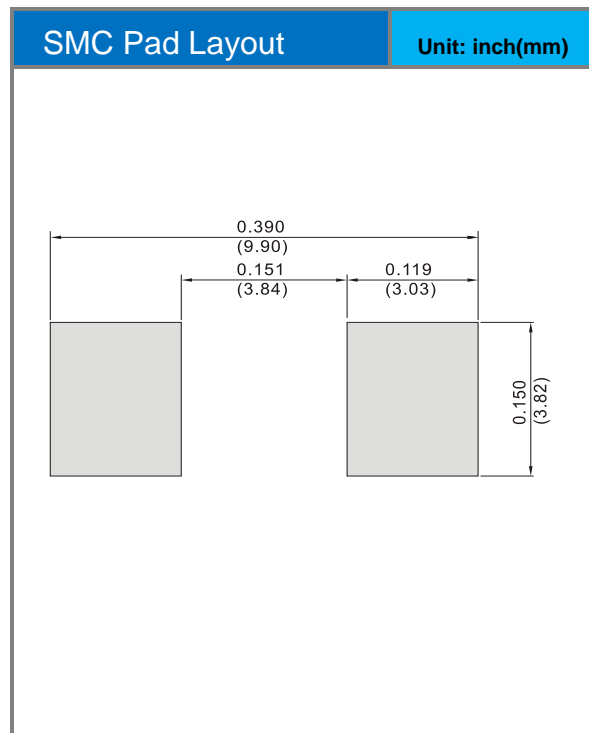
Fig.4 Typical Forward Characteristics

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Product and Packing Information

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

Mounting Pad Layout



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