

RSX501L-20

SURFACE MOUNT SCHOTTKY BARRIER DIODE

Reverse Voltage - 20 V

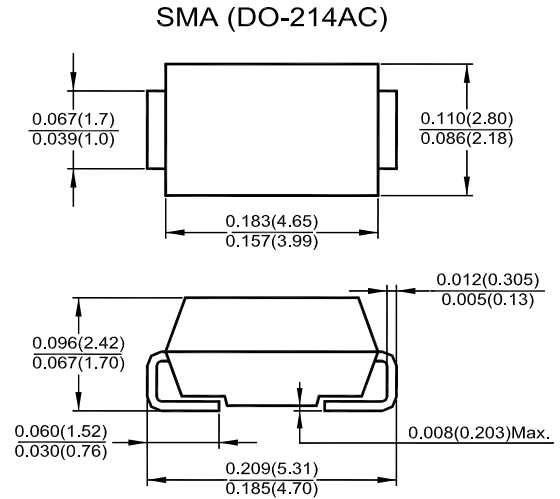
Forward Current - 5 A

Features

- Small power mold type
- Low forward voltage
- Low reverse current
- High reliability

Mechanical Data

- **Case:** SMA (DO-214AC), molded plastic
- **Epoxy:** UL 94V-0 rate flame retardant
- **Lead:** Lead formed for surface mount
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any



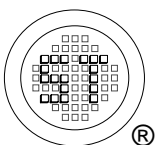
Dimensions in inches and (millimeters)

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, derate current by 20%.

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RM}	25	V
Maximum Reverse Voltage	V_R	20	V
Maximum Average Forward Current ¹⁾	$I_{F(AV)}$	5	A
Maximum Peak Forward Surge Current (60 Hz, One Cycle)	I_{FSM}	70	A
Maximum Forward Voltage at 3 A	V_F	0.39	V
Maximum Reverse Current at 20 V	I_R	500	μA
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_S	- 40 to + 125	°C

¹⁾ $T_C = 90^\circ C$ max. mounted on epoxy board. 180° half sine wave.



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103

ISO 14001:2004
Certificate No. 7116

ISO 9001:2000
Certificate No. 0506088

Dated : 14/04/2008 E

FIG.1 - DERATING CURVE ($I_{F(AV)}$ - T_C)

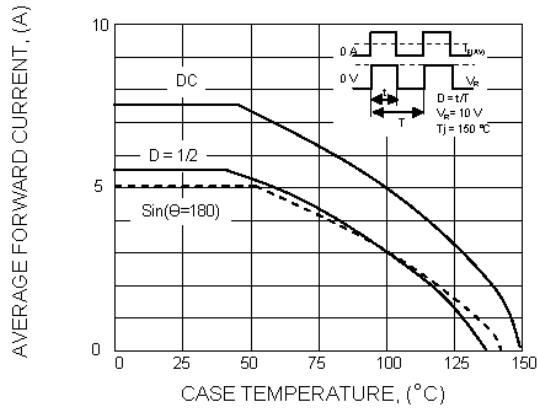


FIG.2 - I_{FSM} - CYCLE CHARACTERISTICS

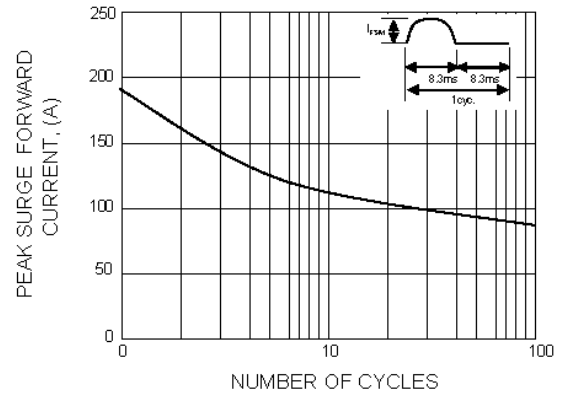


FIG.3 - V_F - I_F CHARACTERISTICS

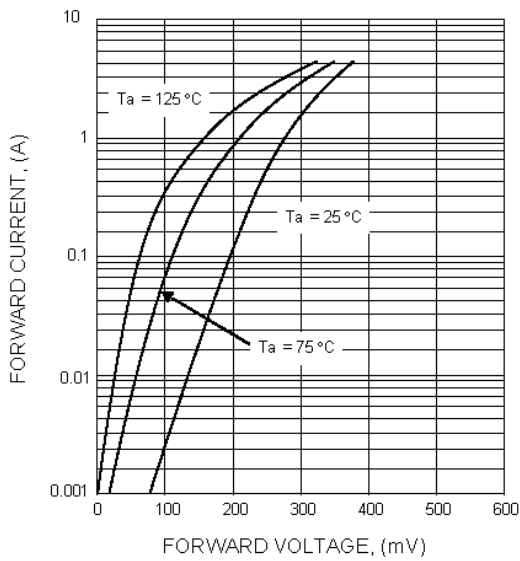
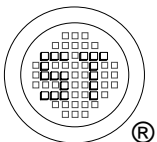
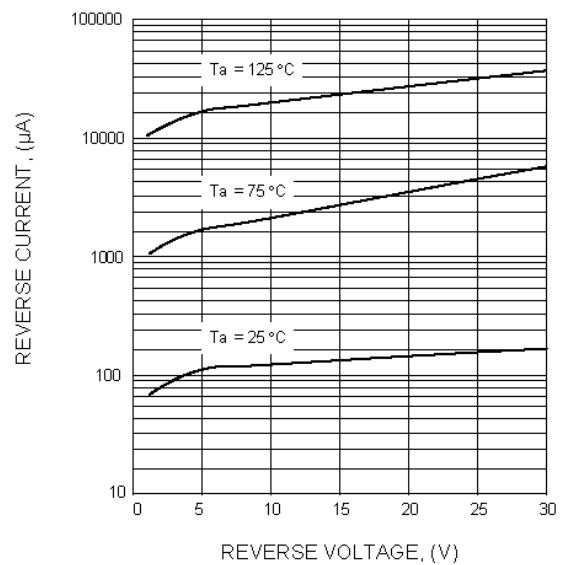


FIG.4 - V_R - I_R CHARACTERISTICS



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