Technical Data
Data Sheet N0107, Rev. -

Green Products

SK520 SCHOTTKY RECTIFIER

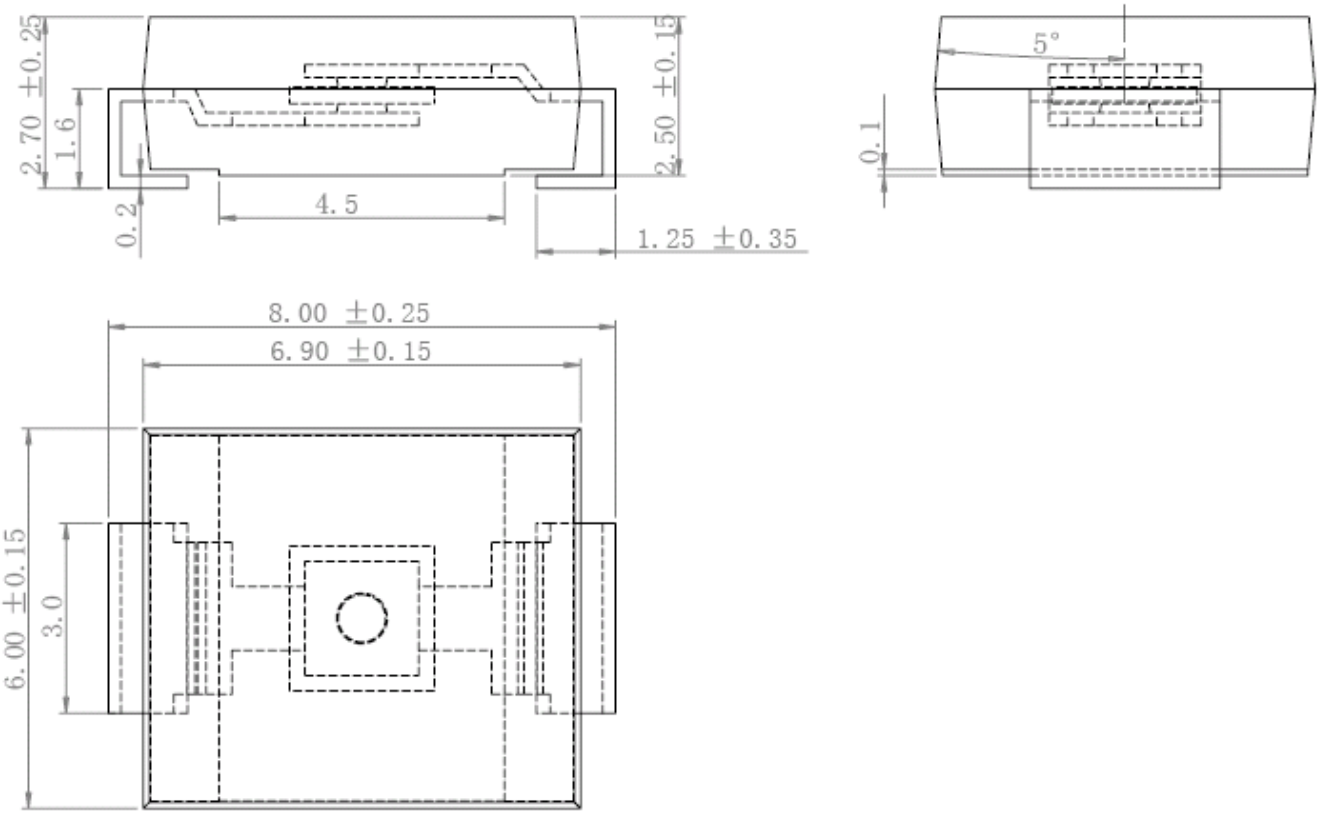
Applications:

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

Features:

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions (In mm / Inches):

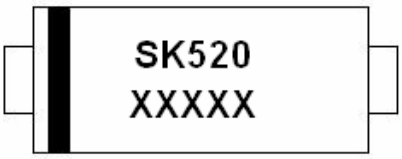


SMC

Technical Data
Data Sheet N0107, Rev. -

Green Products

Marking Diagram:



Where XXXXX is YYWWL

SK520 = Part Name
YY = Year
WW = Week
L = Lot Number

Cautions：Molding resin
Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
SK520	SMC (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SK520	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Average Rectified Output Current (Note 1) @T_A = 105°C	$I_{F(AV)}$	5.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120	A
Forward Voltage @I_F = 5.0A,T_A = 25°C @I_F = 5.0A,T_A = 125°C	V_{FM}	1.10 0.90	V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	1 7	mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	10	°C /W
Storage Temperature Range	T_{STG}	-55 to +150	°C
Max. Junction Temperature	T_J	-55 to +150	°C
Approximate Weight	wt	0.65	g
Case Style	SMC		

Note:1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

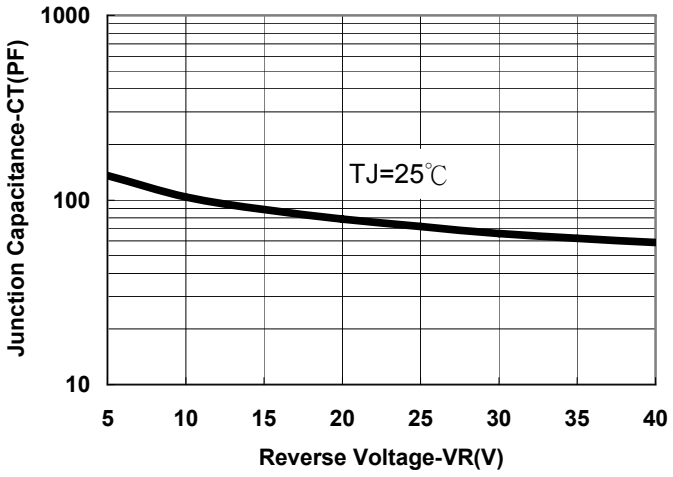


Fig.1-Typical Junction Capacitance Vs.Reverse Voltage

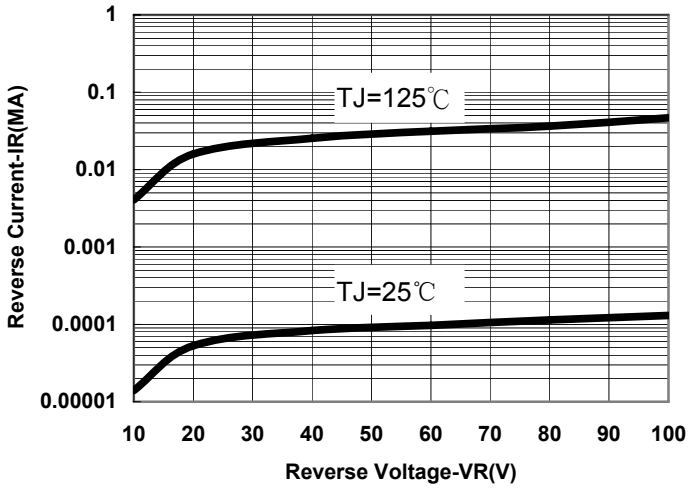


Fig.2-Typical Values Of Reverse Current Vs.Reverse Voltage

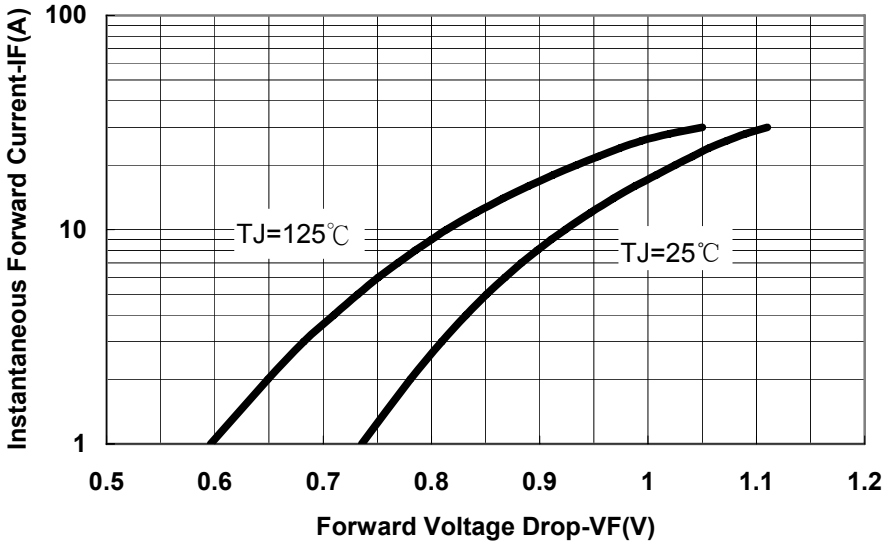


Fig.3-Typical Forward Voltage Drop Characteristics

Technical Data
Data Sheet N0107, Rev. -

Green Products

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