Technical Data
Data Sheet N0181, Rev. -

Green Products

95SQ015 SCHOTTKY RECTIFIER

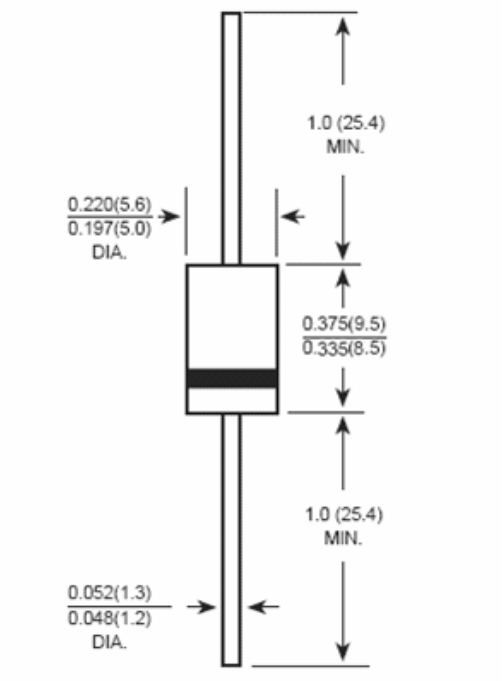
Applications:

- **Parallel switching power supply**
- **Converters**
- **Redundant power subsystems**
- **Reverse battery protection**

Features:

- **125 °C T_J operation (V_R<5V)**
- **High purity, high temperature epoxy encapsulation for enhanced mechanical strength and**
- **moisture resistance**
- **Optimized for OR-ing applications**
- **Ultra low forward voltage drop**
- **High frequency operation**
- **Guard ring for enhanced ruggedness and long term reliability**
- **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 Inches / mm

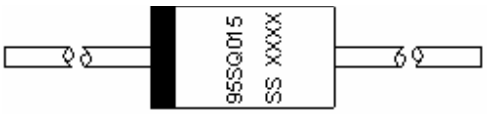


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Marking Diagram:



Where XXXXX is YYWWL

95SQ015 = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

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

Ordering Information:

Device	Package	Shipping
95SQ015	DO-201AD (Pb-Free)	1250pcs / tape

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

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	15 (DC) 25 (Working)	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @T_C = 55 °C, rectangular wave form	9	A
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	I_{FSM}	8.3 ms, half Sine pulse	480	A
Non-Repetitive Avalanche Energy (per leg)	E_{AS}	T_J = 25 °C, I_{AS} = 1 A, L = 9.0 mH	4.5	mJ
Repetitive Avalanche Current (per leg)	I_{AR}	Current decaying linearly to zero in 1 µsec Frequency limited by T_J max. V_A = 3 x V_R typical	1	A

Electrical Characteristics:

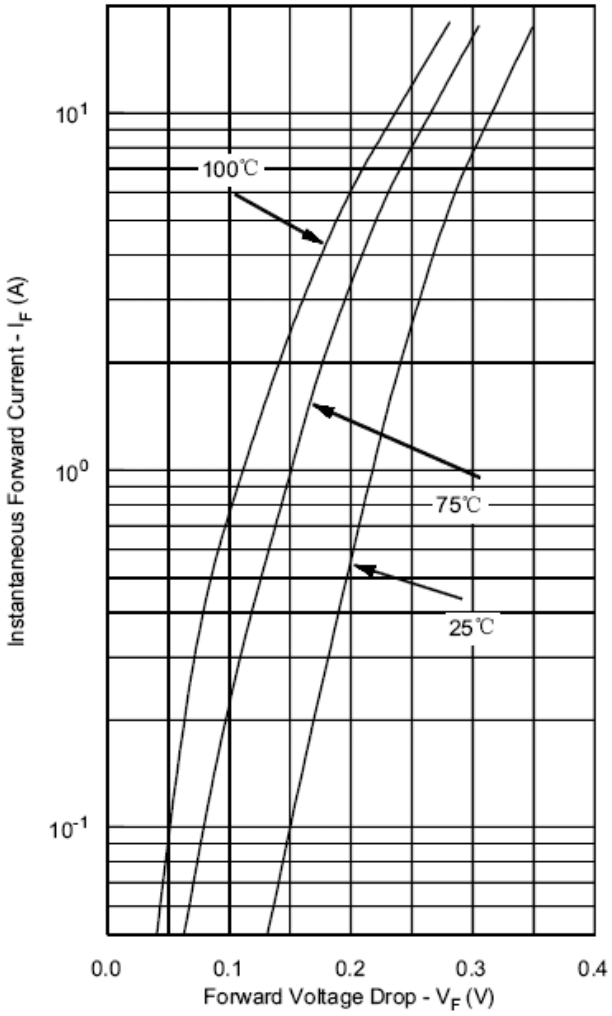
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 9 A, Pulse, T_J = 25 °C @ 18 A, Pulse, T_J = 25 °C	0.34 0.37	V
	V_{F2}	@ 9 A, Pulse, T_J = 125 °C @ 18 A, Pulse, T_J = 125 °C	0.25 0.31	V
Max. Reverse Current	I_{R1}	@V_R = rated V_R ,T_J = 25 °C	7.0	mA
	I_{R2}	@V_R = rated V_R ,T_J = 100 °C	348	mA
	I_{R3}	@V_R = 12 V ,T_J = 100 °C	310	mA
	I_{R4}	@V_R = 5 V ,T_J = 100 °C	190	mA
Typical Junction Capacitance	C_T	@V_R = 5.0 V, Tc=25℃ f_{SIG} = 1MHz	1300	pF
Typical Series Inductance (per leg)	L_S	Measured lead to lead 5 mm from package body	8.0	nH
Max. Voltage Rate of Change	dv/dt	-	10,000	V/μs

* Pulse Width < 300μs, Duty Cycle <2%

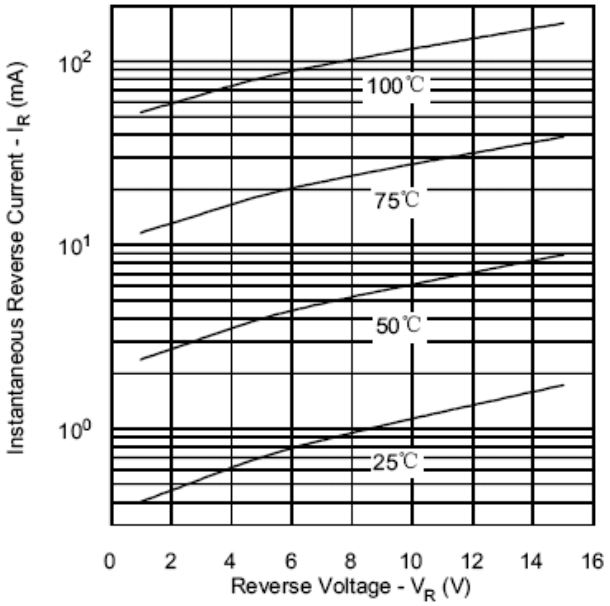
Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +125	°C
Storage Temperature Range	T_{stg}	-	-55 to +150	°C
Maximum Thermal Resistance, Case to Heat Sink	$R_{\theta JA}$	-	44	°C/W
Maximum Thermal Resistance, Junction to lead	$R_{\theta JL}$	-	8	°C/W
Approximate Weight	wt	-	1.02	g
Case Style	DO-201AD			

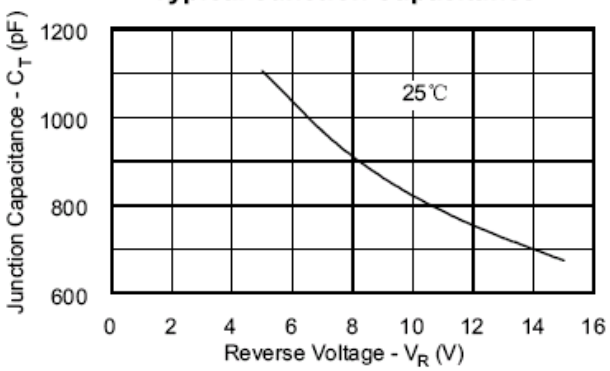
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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