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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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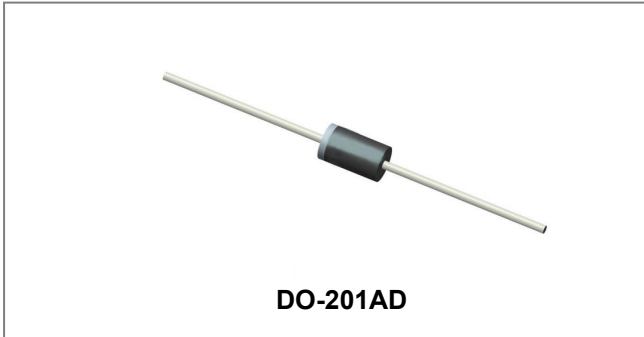
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## 95SQ015 SCHOTTKY RECTIFIER



### Features

- 125°C T<sub>J</sub> operation (V<sub>R</sub><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

### Circuit Diagram



### Applications

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

### Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	-	15(DC) 25(Working)	V
Average Rectified Forward Current	I <sub>F(AV)</sub>	50% duty cycle @T <sub>C</sub> =55°C, rectangular wave form	9	A
Peak One Cycle Non-Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse, T <sub>C</sub> =25°C	480	A
Non-Repetitive Avalanche Energy	E <sub>AS</sub>	T <sub>J</sub> =25°C, I <sub>AS</sub> =1.8A, L=7.4mH	12	mJ
Repetitive Avalanche Current	I <sub>AR</sub>	Current decaying linearly to zero in 1 μsec Frequency limited by T <sub>J</sub> max. V <sub>A</sub> =1.5×V <sub>R</sub> typical	1.8	A

### Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop*	V <sub>F1</sub>	@ 9A, Pulse, T <sub>J</sub> = 25 °C @ 18A, Pulse, T <sub>J</sub> = 25 °C	0.31 0.35	0.34 0.37	V
	V <sub>F2</sub>	@ 9A, Pulse, T <sub>J</sub> = 125 °C @ 18A, Pulse, T <sub>J</sub> = 25 °C	0.22 0.28	0.25 0.31	V
Reverse Current*	I <sub>R1</sub>	@V <sub>R</sub> = rated VR, T <sub>J</sub> = 25 °C	2	7.0	mA
	I <sub>R2</sub>	@V <sub>R</sub> = rated VR, T <sub>J</sub> = 100 °C	180	348	mA
	I <sub>R3</sub>	@V <sub>R</sub> = 12 V, T <sub>J</sub> = 100 °C	130	310	mA
	I <sub>R4</sub>	@V <sub>R</sub> = 5 V, T <sub>J</sub> = 100 °C	80	190	mA
Junction Capacitance	C <sub>T</sub>	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C, f <sub>SIG</sub> = 1MHz	1100	1300	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/us

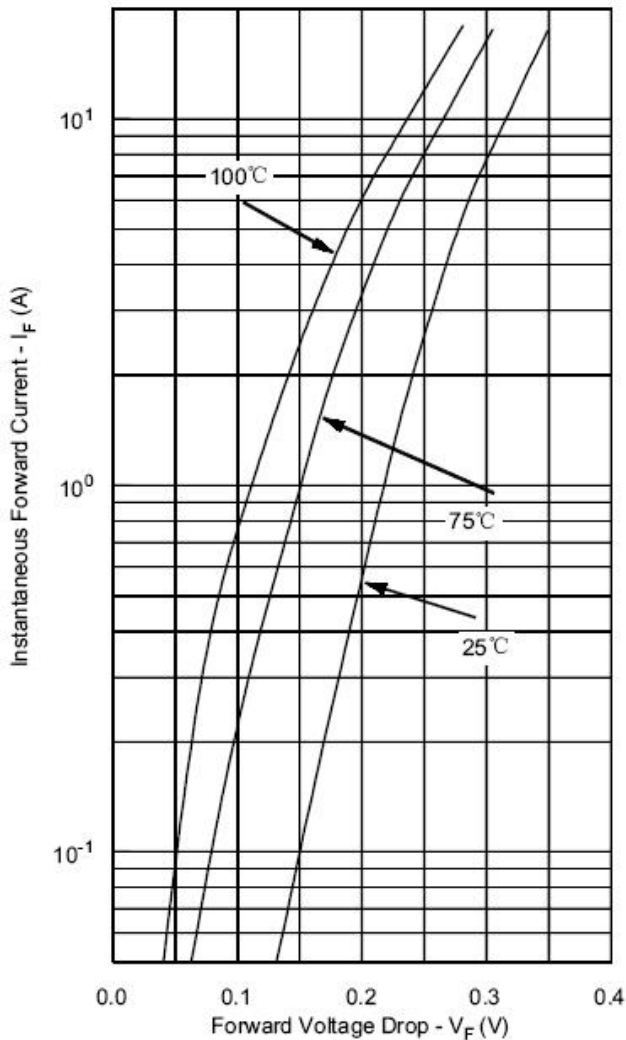
\* Pulse width < 300 μs, duty cycle < 2%

**Thermal-Mechanical Specifications:**

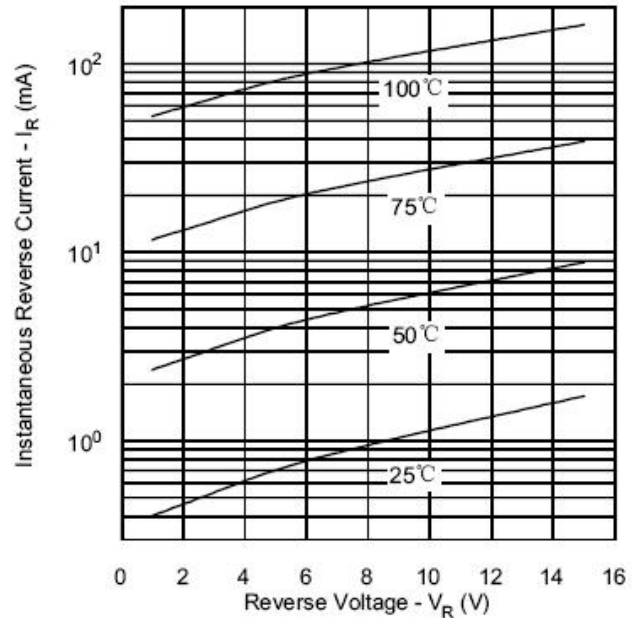
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	$T_J$	-	-55 to +125	°C
Storage Temperature	$T_{stg}$	-	-55 to +150	°C
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	DC operation	8	°C/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	DC operation	44	°C/W
Approximate Weight	wt	-	1.02	g

**Ratings and Characteristics Curves**

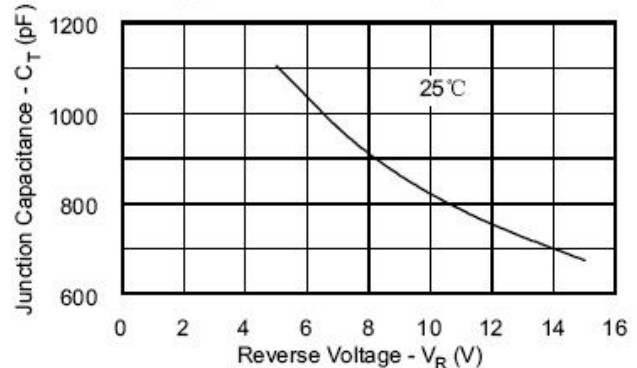
Typical Forward Characteristics



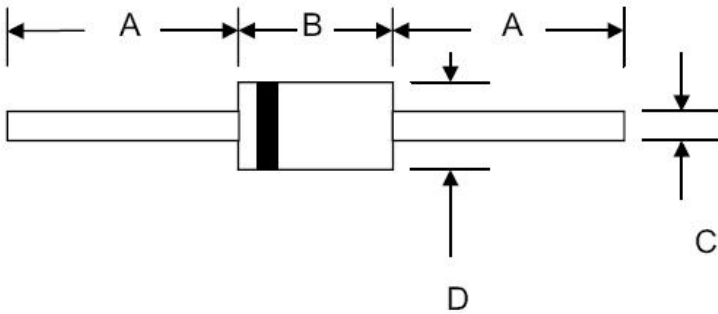
Typical Reverse Characteristics



Typical Junction Capacitance



**Mechanical Dimensions DO-201AD**



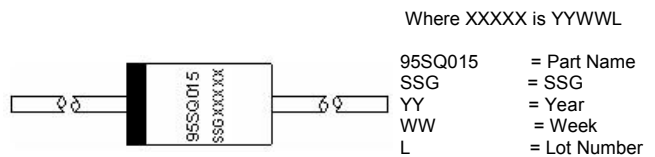
SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	8.50	9.50	0.335	0.374
C	1.2	1.3	0.048	0.052
D	5.0	5.6	0.197	0.220

**Ordering Information**

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

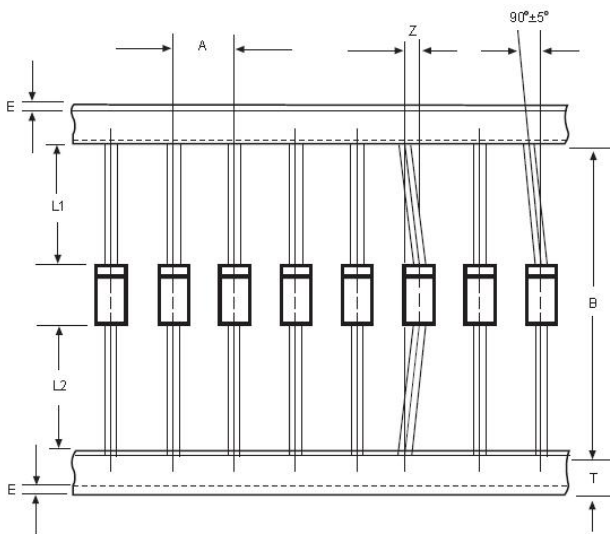
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**Marking Diagram**



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

**Carrier Tape Specification DO-201AD**



SYMBOL	Millimeters	
	Min.	Max.
A	9.50	10.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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