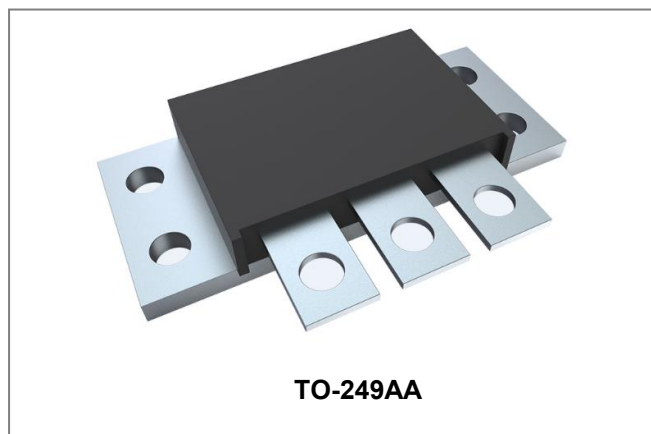


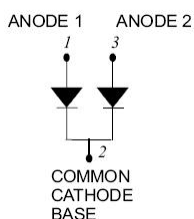
169CMQ135/169CMQ150 SCHOTTKY RECTIFIER



Features

- 150°C T_J operation
- Isolated heatsink
- Low profile, high current package
- Center tap module
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- 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

Schematic & Pin Configuration



Applications

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

Maximum Ratings:

Characteristics	Symbol	Condition	Max.		Units
Peak Repetitive Reverse Voltage	V _{RRM}	-	135	169CMQ135	V
Working Peak Reverse Voltage	V _{RWM}		150	169CMQ150	
DC Blocking Voltage	V _R				
Average Rectified Forward Current	I _{F(AV)}	50% duty cycle @T _c =87°C, rectangular wave form	80(Per Leg) 160(Per Device)		A
Peak One Cycle Non-Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine pulse	960		A

Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop(Peg Leg)*	V _{F1}	@ 80A, Pulse, T _J = 25 °C	0.81	1.05	V
	V _{F2}	@ 80A, Pulse, T _J = 125 °C	0.70	0.85	V
Reverse Current(Peg Leg)*	I _{R1}	@V _R = rated V _R , T _J = 25 °C	0.0002	1.5	mA
	I _{R2}	@V _R = rated V _R , T _J = 125 °C	0.4	21	mA
Junction Capacitance(Peg Leg)	C _T	@V _R = 5V, T _C = 25 °C f _{SIG} = 1MHz	1150	1300	pF
Voltage Rate of Change	dv/dt	-	-	10,000	V/μs

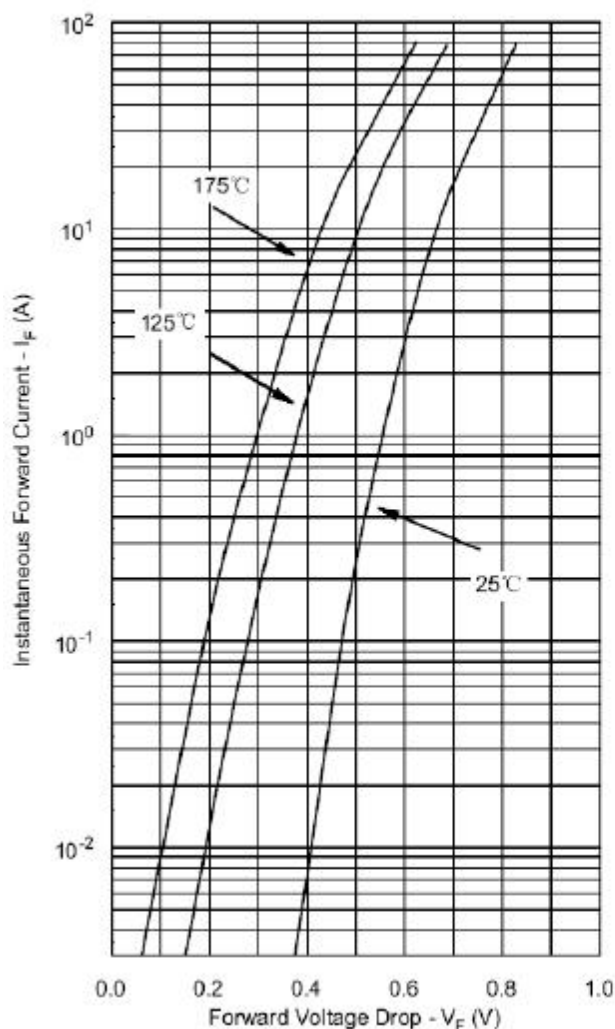
* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications:

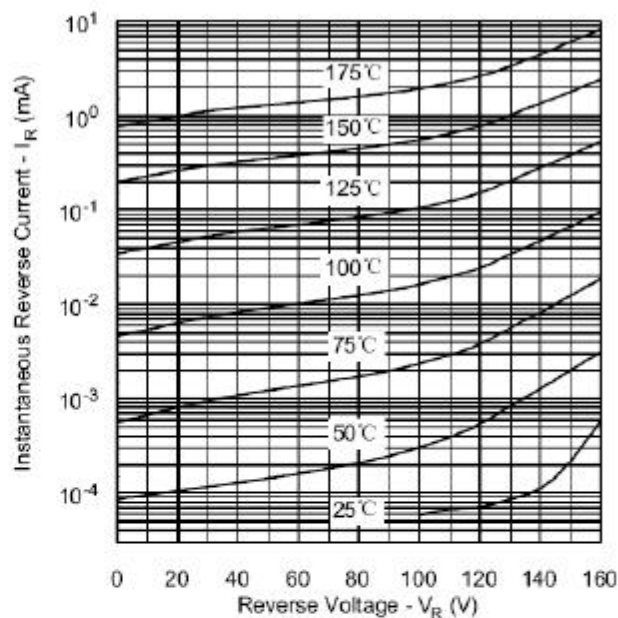
Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T _J	-	-55 to +150	°C
Storage Temperature	T _{stg}	-	-55 to +150	°C
Typical Thermal Resistance Junction to Case (Per Leg)	R _{θJC}	DC operation	1.0	°C/W
Typical Thermal Resistance Junction to Case (Per Package)	R _{θJC}	DC operation	0.50	°C/W
Typical Thermal Resistance, case to Heat Sink	R _{θcs}	Mounting surface, smooth and greased	0.10	°C/W
Mounting Torque	T _M	-	40(min)	Kg-cm
			58(max)	
Approximate Weight	wt	-	58	g

Ratings and Characteristics Curves

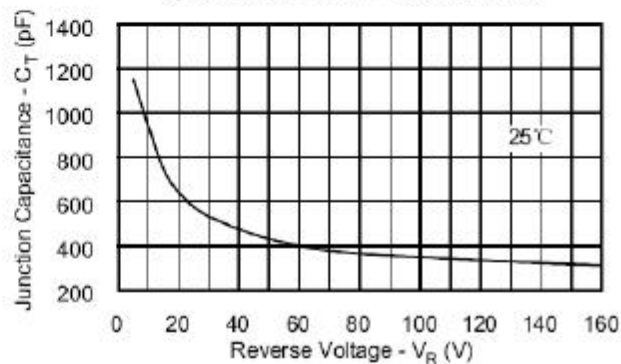
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



Ordering Information

Device	Package	Shipping
169CMQ SERIES	TO-249AA(Pb-Free)	24pcs/ box

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



RoHS

Technical drawing of a mechanical part showing two views: a top view and a side view. The top view shows a rectangular block with three vertical slots labeled 1, 2, and 3. Dimensions include overall width of 2.000 (50.80), slot widths of 0.340 (8.64) and 0.450 (11.43), and slot spacings of 0.900 (22.86). The side view shows the profile of the block with a total height of 1.010 (25.65) and a base thickness of 0.030 (0.76). It also shows the thickness of the slots and the overall length of 2.410 (61.21).

Diagram of a 3-pin connector. The top section is a rectangle with two circles on the left and two on the right. Inside, the text reads: SS XXXX, 169CMQ135. Below this, three pins are shown, labeled 1, 2, and 3 from left to right.

1st row SS YYWW
2nd row 169CMQ135
3rd row 1 2 3 (pin)
SS = SS
YY = Year
WW = Week

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

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• <http://www.smc-diodes.com> - sales@smc-diodes.com •

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