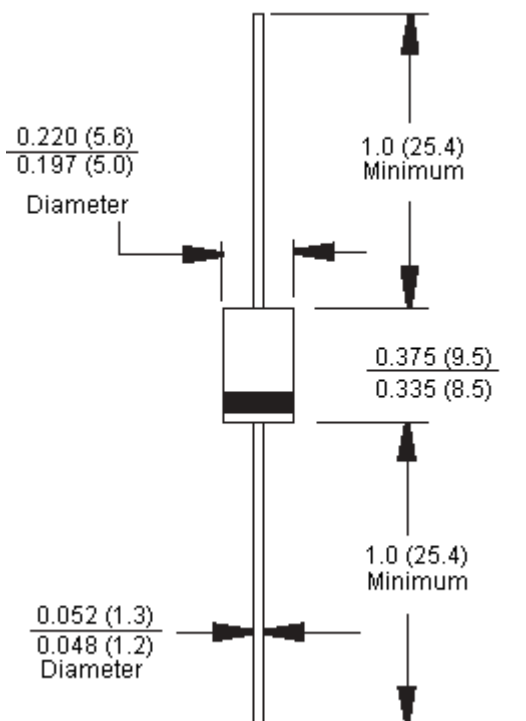




Features:

- Low power loss, high efficiency.
- High current capability, low V_F .
- High reliability.
- High surge current capability.
- Epitaxial construction.
- Guard-ring for transient protection.
- For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.

DO-201AD



Dimensions : Inches (Millimetres)

Mechanical Data:

Cases	: DO-201AD moulded plastic.
Lead	: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed.
Polarity	: Colour band denotes cathode end.
High temperature soldering guaranteed	: 260°C/10 seconds/0.375 inch, (9.5mm) lead lengths at 5lbs., (2.3kg) tension.
Weight	: 1.1 grams.

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

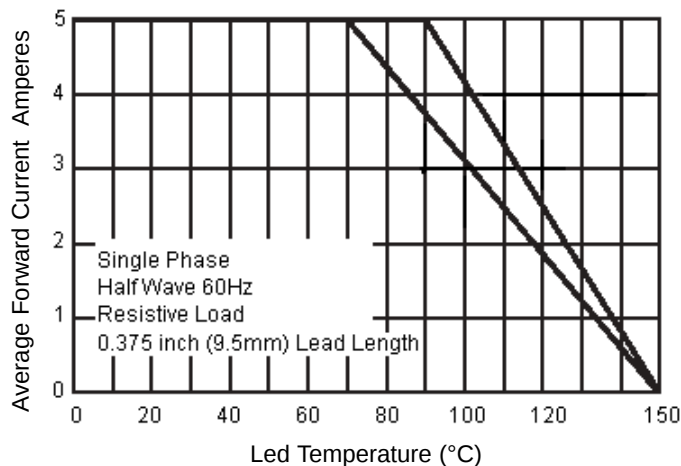
Type Number	Symbol	SR509	SR510	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	90	100	V
Maximum RMS Voltage	V _{RMS}	63	70	
Maximum DC Blocking Voltage	V _{DC}	90	100	
Maximum Average Forward Rectified Current	I _(AV)	5.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	120		
Maximum Instantaneous Forward Voltage at 5.0A	V _F	0.85		V
Maximum DC Reverse Current at T _A = 25°C at Rated DC Blocking Voltage at T _A = 125°C	I _R	0.1 5.0		μA μA
Typical Junction Capacitance (Note 2)	C _j	120		pF
Typical Thermal Resistance (Note1)	R _{θJA} R _{θJC}	10 2		°C/W
Operating Junction Temperature Range	T _J	-65 to +150		°C
Storage Temperature Range	T _{STG}			

Note: 1. Mount on Cu-Pad Size 5m x 5mm on PCB.

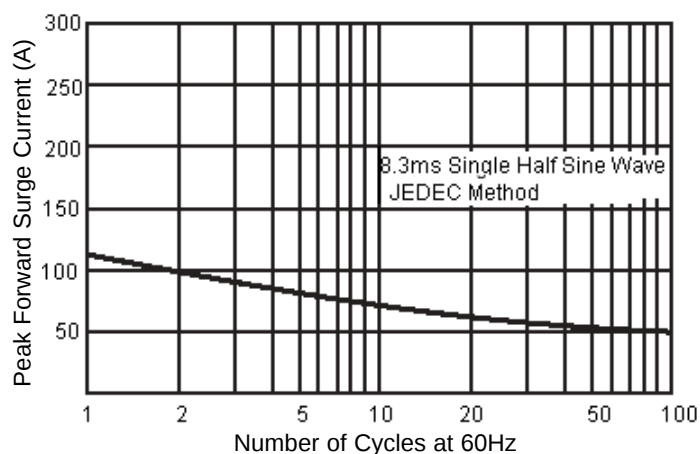
2. Measured at 1MHz and Applied Reverse Voltage of 4.0V dc.

Ratings and Characteristic Curves (SR309, SR310)

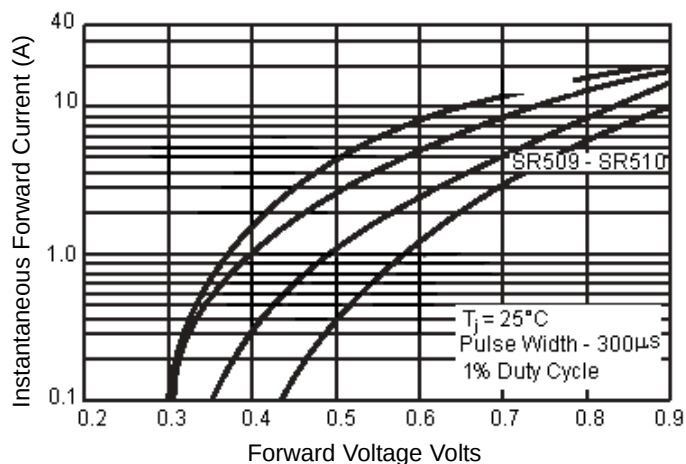
Maximum Forward Current Derating Curve



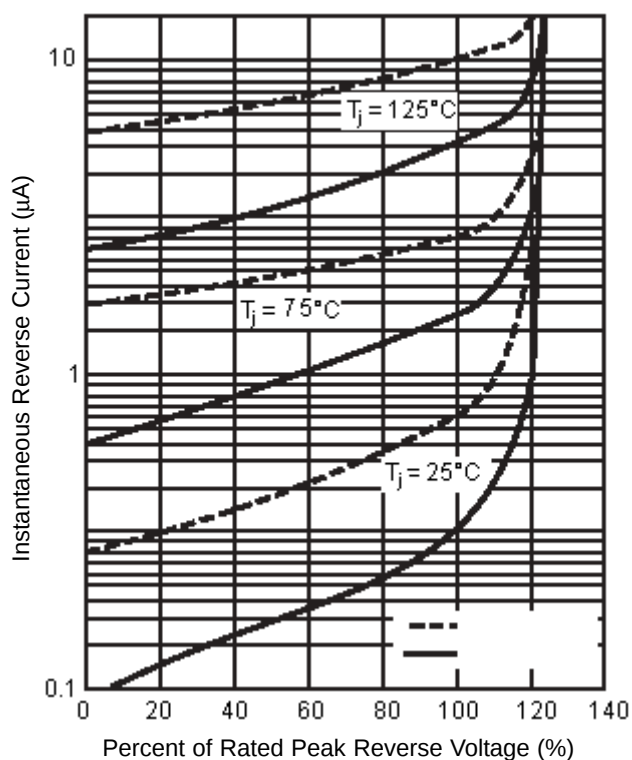
Maximum Non-Repetitive Forward Surge Current



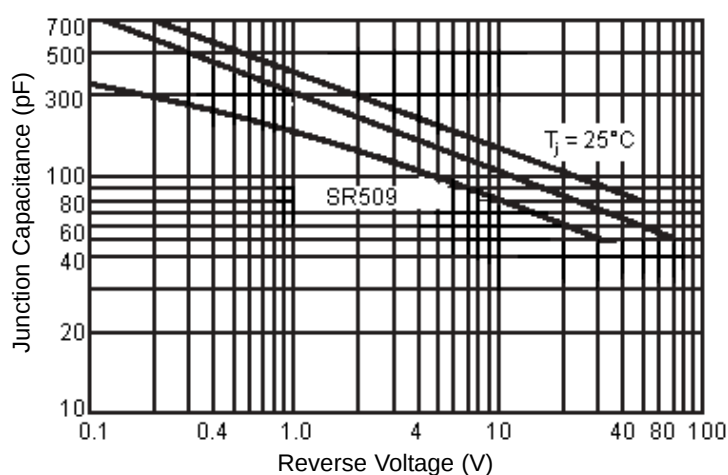
Typical Forward Characteristics



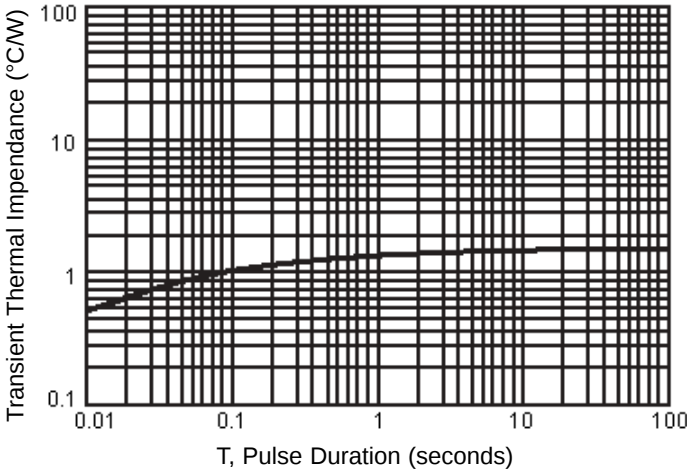
Typical Reverse Characteristics



Typical Junction Capacitance



Typical Transient Thermal Characteristics



Part Number Table

Description	Part Number
Diode, Schottky, 5A, 90V	SR509
Diode, Schottky, 5A, 100V	SR510

Notes:

International Sales Offices:

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