

# 10.0 AMP. Schottky Barrier Rectifiers

#### Features

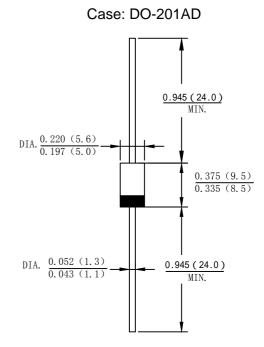
- · Schottky Barrier Chip
- · High Thermal Reliability
- · Patented Super Barrier Rectifier Technology
- · High Forward Surge Capability

Low power consumption, high efficiency

- $\cdot$  Excellent High Temperature Stability
- · Plastic material-UL flammability 94V-0

#### **Mechanical Data**

- · Case: DO-201AD, molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- · Polarity:Cathode Band
- · Mounting Position:Any
- · Marking:Type Number
- $\cdot$  Lead Free:For RoHS/Lead Free Version



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub> =25 ℃ unless otherwise specified

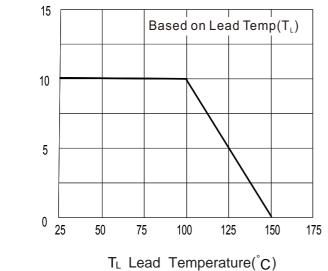
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol		SR10V45L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage	V <sub>RRM</sub> V <sub>RWM</sub>		45	v
DC blocking voltage	V <sub>DC</sub>			
RMS Rectified Voltage	V <sub>R(RMS)</sub>		32	V
Average Rectified Output Current	IF	(AV)	10	А
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method)	IFSM		245	A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t		249.1	A <sup>2</sup> S
Forward Voltage Drop T <sub>A</sub> =25 ℃ @IF=10A	Vf	Max.	0.48	v
		Тур.	0.45	v
Peak Reverse Curent $T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $T_A = 100^{\circ}C$	lR		0.2 10	mA
Typical Junction Capacitance (Note 1)	CJ		590	pF
Typical Thermal Resistance Junctionto Ambient	Reja Rejl		80 15	°C/W
Operating junction temperature range	TJ		-55 to +150	°C
storage temperature range	Tstg		-55 to +150	°C

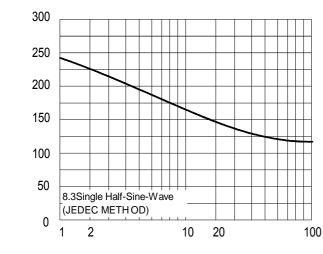
Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



#### Fig. 1 Forward Current Derating Curve

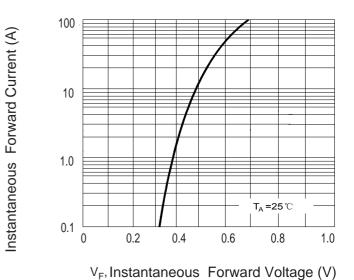


#### Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

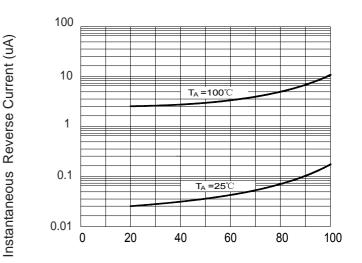


Number Of Cycles At 60 Hz

Fig. 2 Instantaneous Forward Characteristics



## Fig. 4 Reverse Characteristics (per diode)



Percent Of Rated Peak Reverse Voltage (%)



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