SR520L THRU SR5200L

LOW VF SCHOTTKY BARRIER RECTIFIERS

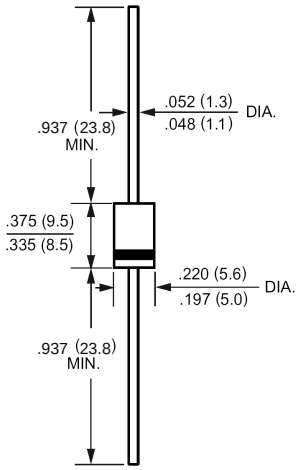
FEATURES

· High current capability
· High surge current capability
· Low forward voltage drop
· Exceeds environmental standards of MIL-S-19500/228
· For use in low voltage, high frequency inverters
free wheeling, and porlarlity protection applications

MECHANICAL DATA

Case: Molded plastic, DO-201AD
Epoxy: UL 94V-O rate flame retardant
Lead: Axial leads, solderable per MIL-STD-202,
method 208 guaranteed
Polarity: Color band denotes cathode end
Mounting position: Any
Weight: 0.04ounce, 1.1gram

DO-201AD(DO-27)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

	Symbols	*SR520L*	*SR540L*	*SR560L*	*SR580L*	*SR5100L*	*SR5150L*	*SR5200L*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	**Volts**
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	105	140	**Volts**
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	**Volts**
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length	$I_{(AV)}$	5.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							**Amp**
Maximum Forward Voltage at 5.0A DC and 25℃	V_F	0.40	0.45	0.55	0.75		0.85		**Volts**
Maximum Reverse Current at T_A=25℃	I_R	0.5							**mAmp**
at Rated DC Blocking Voltage T_A=75 ℃		50							
Typical Junction Capacitance (Note 1)	C_J	500		380					**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	15		10					**℃/W**
Operating Junction Temperature Range	T_J	-55 to +125		-55 to +150					**℃**
Storage Temperature Range	Tstg	-55 to +150							**℃**

NOTES:
1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.
2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

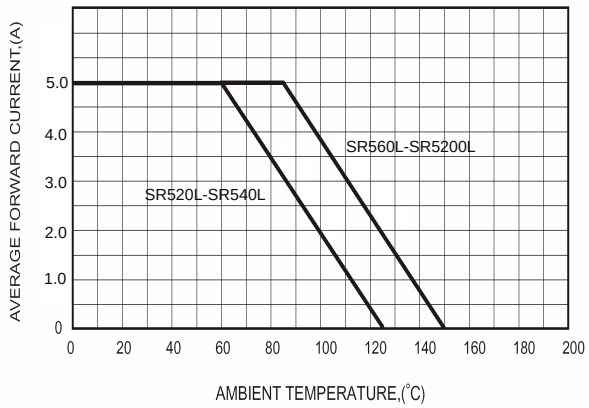


FIG.2-TYPICAL FORWARD CHARACTERISTICS

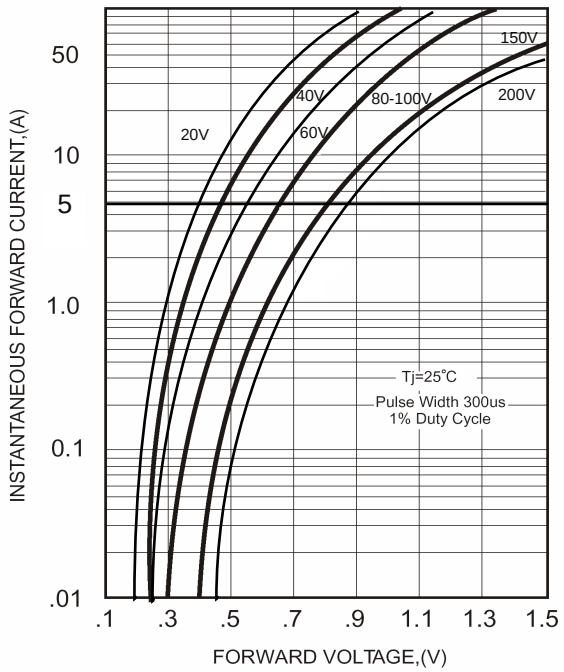


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

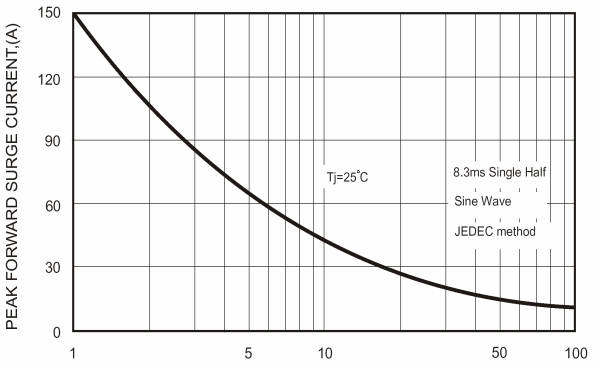


FIG.4-TYPICAL JUNCTION CAPACITANCE

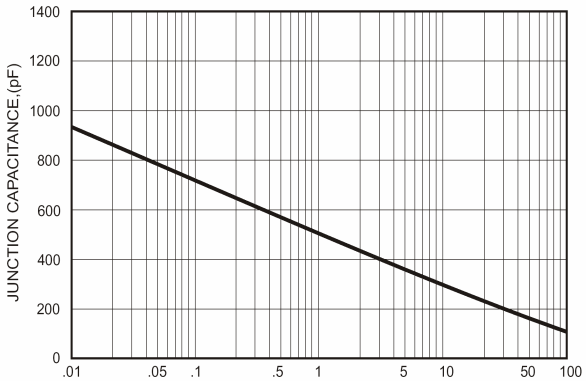


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

