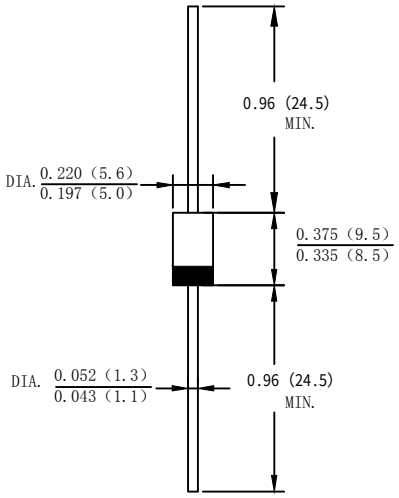
SR1020 THRU SR10200

10.0 AMP.Schottky Barrier Rectifiers

Features

- Metal silicon rectifier,majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High surge capability
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications
- Plastic material-UL flammability 94V-0

DO-201AD



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic DO-201AD
- Polarity: Color band dentes cathode end
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	SR 1020	SR 1030	SR 1040	SR 1045	SR 1050	SR 1060	SR 1080	SR 10100	SR 10150	SR 10200	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current.375"(9.5mm) lead length@T_L=100℃	IF(AV)	10.0										A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150										A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	93.375										A^2s
Forward Voltage @IF=10.0A(Note 1)	V_{FM}	0.55				0.7		0.85		0.92		V
Peak Reverse Current @T_A=25℃	I_R	0.3						0.05				mA
At Rated DC Blocking Voltage @T_A=100℃		10						5				
Typical Junction Capacitance (Note2)	C_J	450										pF
Typical Thermal Resistance Junction to case	$R_{\theta JA}$	3.0										℃/W
Operating Temperature Range	T_J	-55 to +150										℃
/Storage Temperature Range	T_{STG}	-55 to +150										℃

Note:1. 300us Pulse Width,2%Duty Cycle

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

FIG.1-FORWARD CURRENT DERATING CURVE

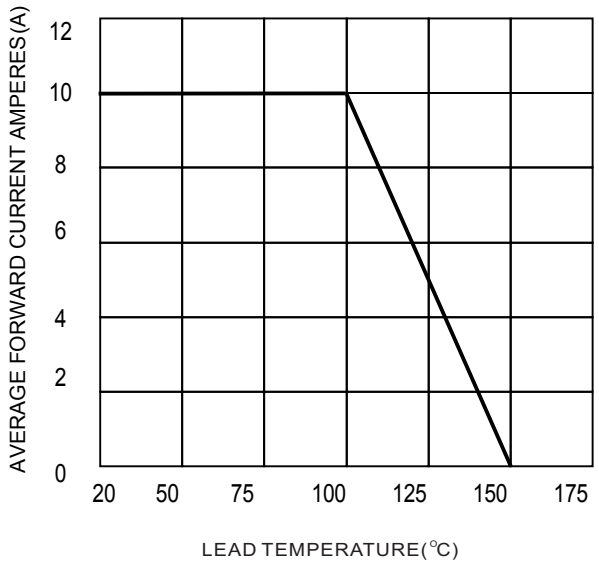


FIG.2-TYPICAL FORWARD CHARACTERISTICS

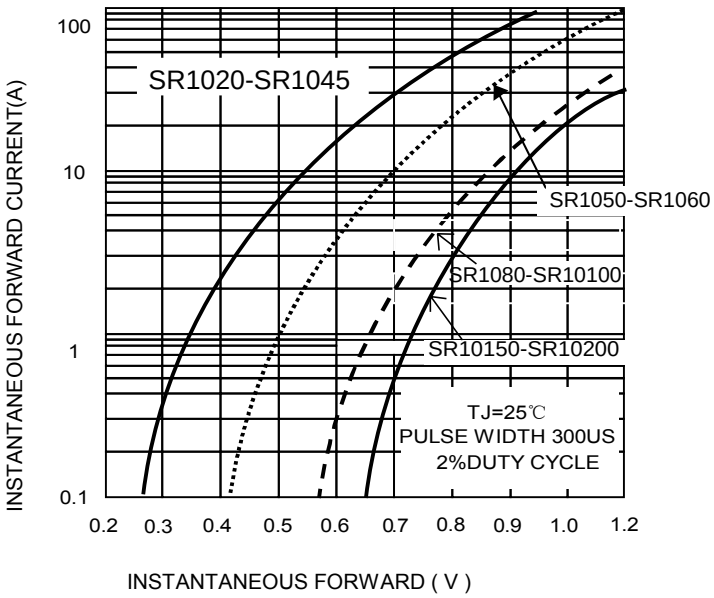


FIG.3-MAXIMUM NON-REPETITVE SURGE

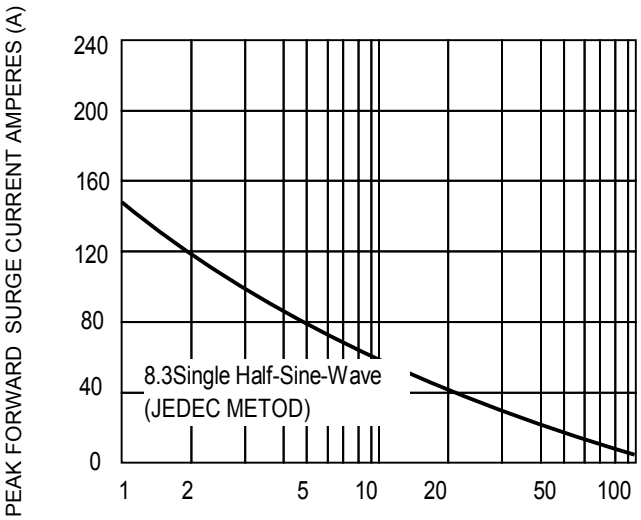


FIG.4-TYPICAL REVERSE CHARACTERISTICS

