



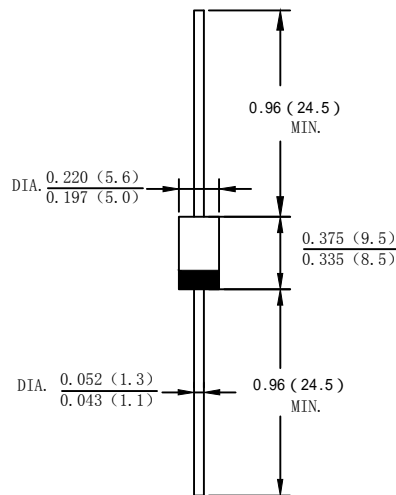
### Features

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

### Mechanical Data

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

### DO-27/DO-201AD



Dimensions in inches and (millimeters)

### 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	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@ $T_L=100^\circ C$	$I_{F(AV)}$	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 <sup>2</sup> s	
Forward Voltage @ $I_F=10.0A$ (Note 1)	$V_{FM}$	0.55			0.7		0.85		0.92			V	
Peak Reverse Current @ $T_A=25^\circ C$	$I_R$	0.3						0.05					mA
At Rated DC Blocking Voltage @ $T_A=100^\circ C$		10						5					
Typical Junction Capacitance (Note2)	$C_J$	450										pF	
Typical Thermal Resistance Junction to case	$R_{\theta JA}$	3.0										$^\circ C/W$	
Operating Temperature Range	$T_J$	-55 to +150						-55 to +175					$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150						-55 to +175					$^\circ C$

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

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



### Ratings and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

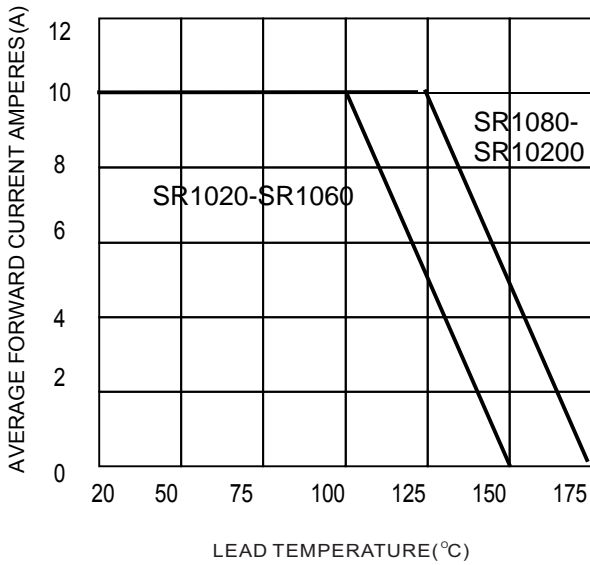


FIG.2-TYPICAL FORWARD CHARACTERISTICS

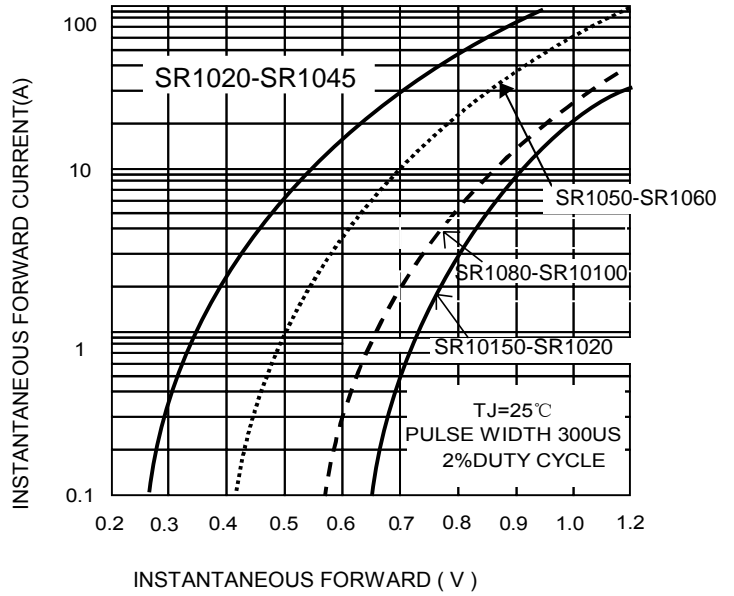


FIG.3-MAXIMUM NON-REPETITIVE SURGE

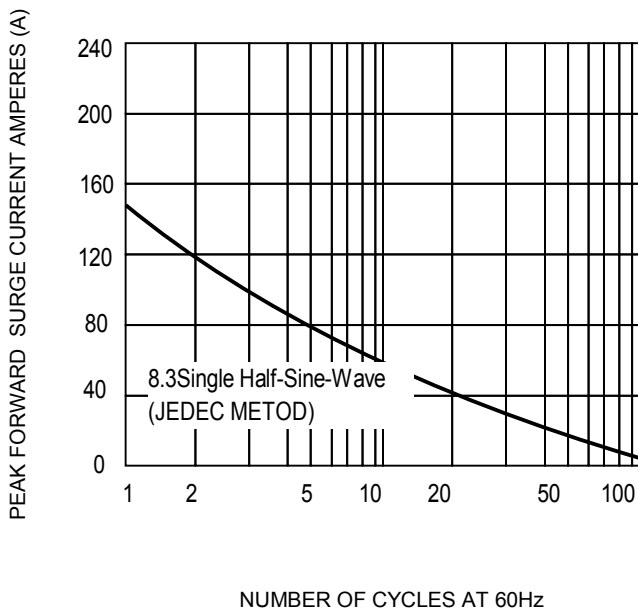
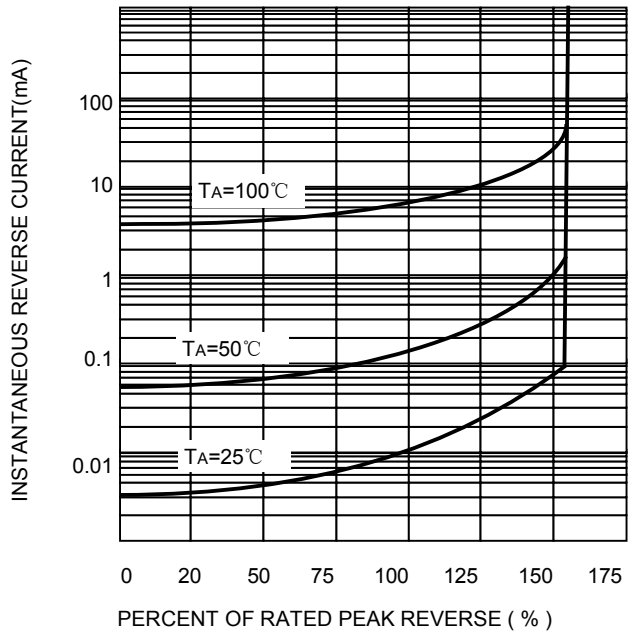


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-27	1250/AMMO	12500	40X26.5X30	14.00	12.00