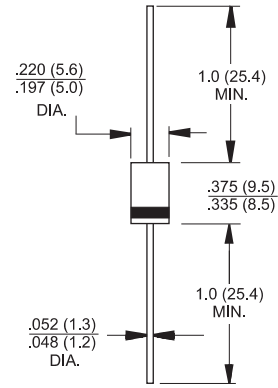




DO-27/DO-201AD

Features

- ✧ Low power loss, high efficiency.
- ✧ High current capability, Low VF.
- ✧ 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



Mechanical Data

- ✧ Cases: DO-201AD molded plastic
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 0.014 ounces, 0.39 grams

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	Units	
		320	330	340	350	360	380	390	3100	3150	3200			
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	150	200	V		
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	105	140	V		
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	150	200	V		
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	3.0										A		
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80.0										A		
Maximum Instantaneous Forward Voltage @3.0A	V_F	0.45	0.55	0.70				0.85				V		
Maximum D.C. Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	0.5				0.1				2.0				mA
Typical Junction Capacitance (Note 2)	C_j	200				130				72				pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$					50				15				°C/W
Operating Junction Temperature Range	T_J	-55 to +150				-55 to +175								°C
Storage Temperature Range	T_{STG}	-55 to +150				-55 to +175								°C

- Notes:
1. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



RATINGS AND CHARACTERISTIC CURVES

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

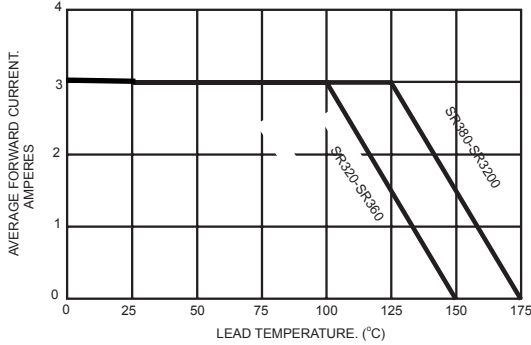


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

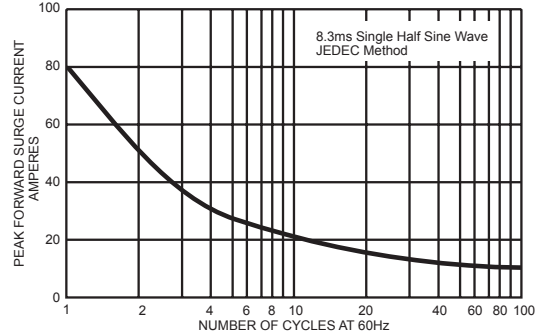


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

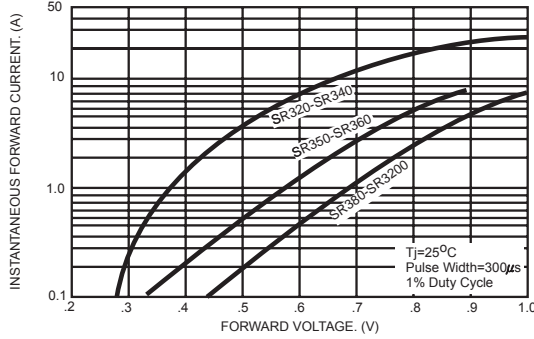


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

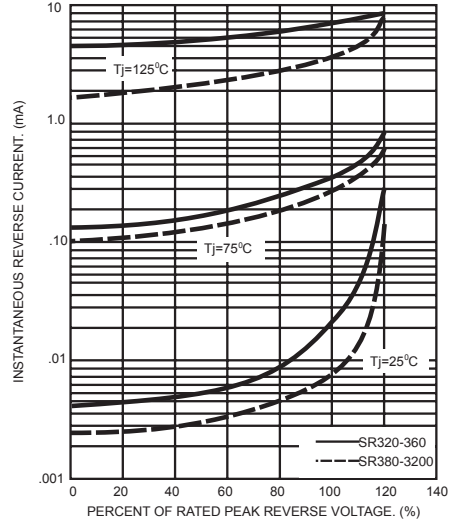


FIG. 5- TYPICAL JUNCTION CAPACITANCE

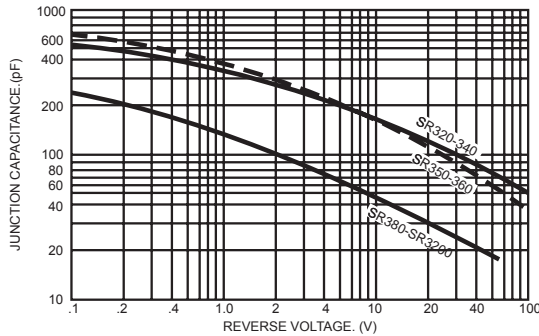
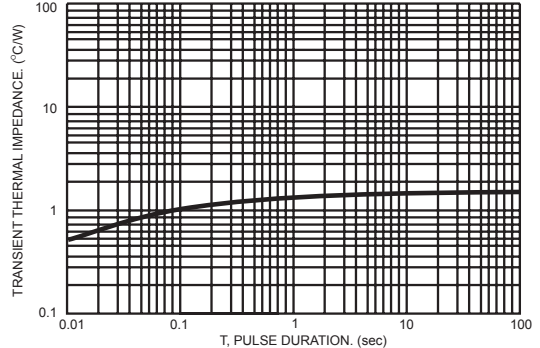


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



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