SR320U THRU SR3250U

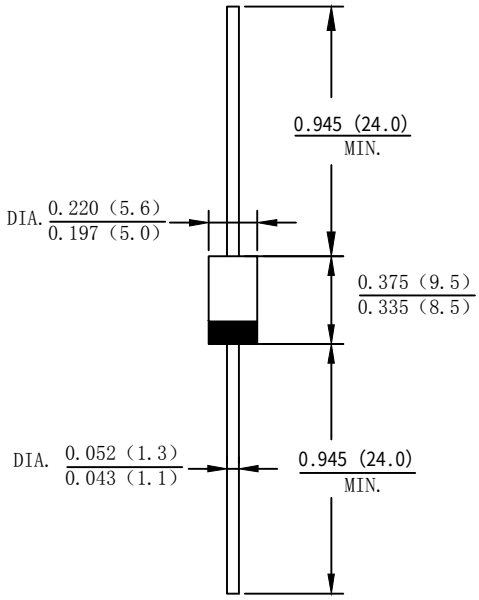
3.0 AMP. Schottky Barrier Rectifiers

Features

•Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.

- Guard ring for overvoltage protection
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- High surge capability

Case: DO-201AD



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version

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 320U	SR 330U	SR 340U	SR 345U	SR 350U	SR 360U	SR 380U	SR 3100U	SR 3150U	SR 3200U	SR 3250U	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	250	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	140	175	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	250	V
Average Rectified Output Current (Note 1) @T_L=100℃	IF(AV)	3.0											A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	90											A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	33.615											A^2s
Forward Voltage @IF=3.0A	V_{FM}	0.50				0.67		0.82		0.90		0.92	V
Peak Reverse Current @T_A=25℃	I_R	0.1						0.05					mA
At Rated DC Blocking Voltage @T_A=100℃		10.0						5.0					
Typical Junction Capacitance (Note 2)	C_J	140						80					pF
Typical Thermal Resistance Junction to Ambient(Note 1)	$R_{\theta JL}$ $R_{\theta JC}$ $R_{\theta JA}$	10 12 45											℃/W
Operating Temperature Range	T_J	-55 to + 150											℃
Storage Temperature Range	T_{STG}	-55 to + 150											℃

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

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

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

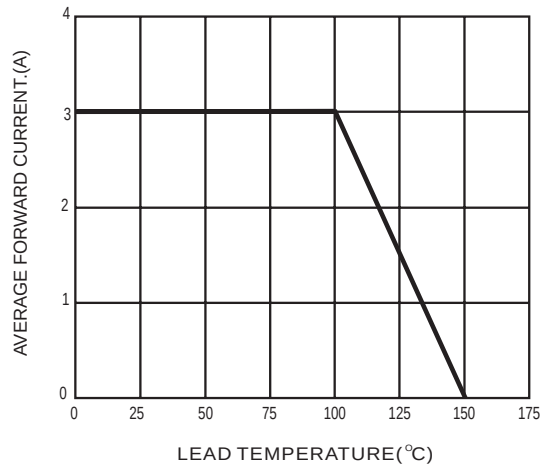


FIG.2- TYPICAL FORWARD CHARACTERISTICS

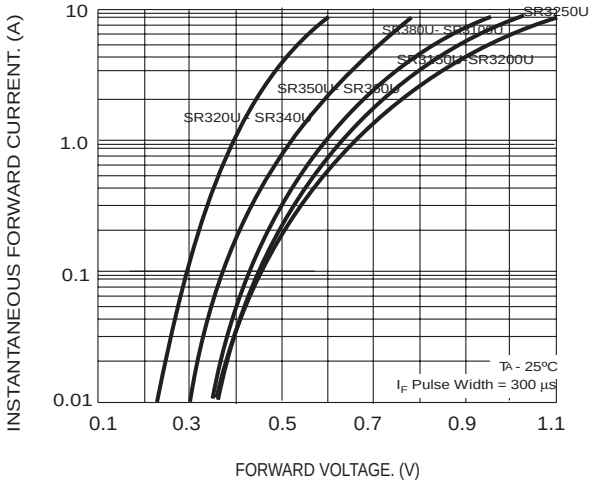


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

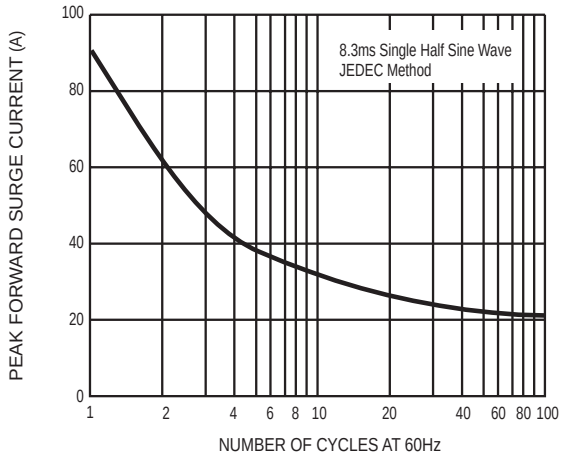
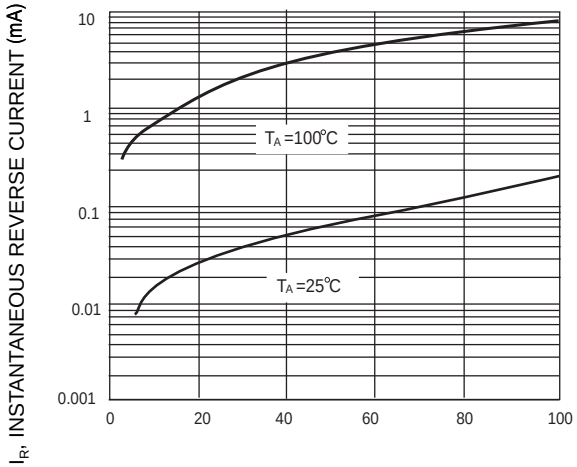


FIG.4- TYPICAL JUNCTION CAPACITANCE



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