

### Features

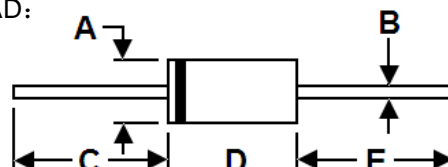
- \* Low Forward Voltage Drop
- \* High Current Capability
- \* High Reliability
- \* High Surge Current Capability



RoHS  
COMPLIANT

### Package Outline Dimensions

DO-201AD:



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.8	5.3	0.189	0.209
B	1.2	1.3	0.047	0.051
C	25.4	-	1.0	-
D	7.2	9.6	0.283	0.378
E	25.4	-	1.0	-

### Mechanical Data

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end

### 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	Symbols	SR502	SR503	SR504	SR505	SR506	SR508	SR510	SR515	SR520	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum D.C Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0									A
Peak Forward Surge Current, 8.3ms single half sine-wave	$I_{FSM}$	120									A
Maximum Instantaneous Forward Voltage at 5.0A(Note1)	$V_F$	0.55			0.70		0.85		0.95		V
Maximum Reverse Current @ rated VR $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	0.5					0.1				mA
		15			10		-				
		-			-		5		1		
Typical Thermal Resistance	$R_{\theta JC}$	6									°C/W
	$R_{\theta JA}$	35									
Operating Temperature Range	$T_J$	-55 to +125				-55 to +150					°C
Operating Temperature Range	$T_{STG}$	-55 to +150									°C

Note: 1、Pulse test:  $t_p=300\ \mu\text{s}$ , 1% duty cycle

### Ratings and Characteristic Curves

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

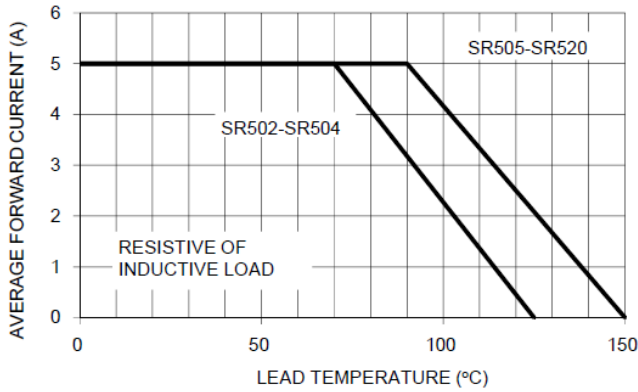


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

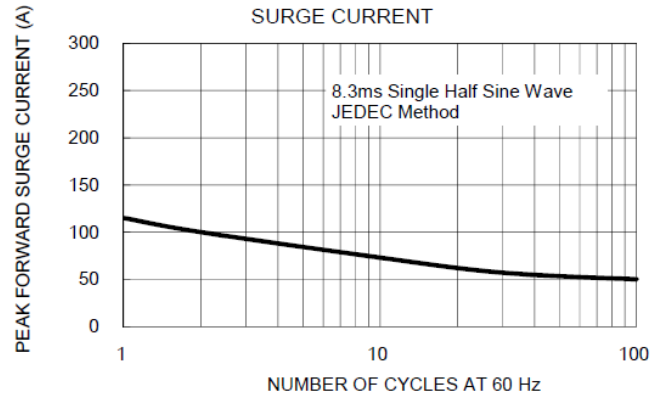


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

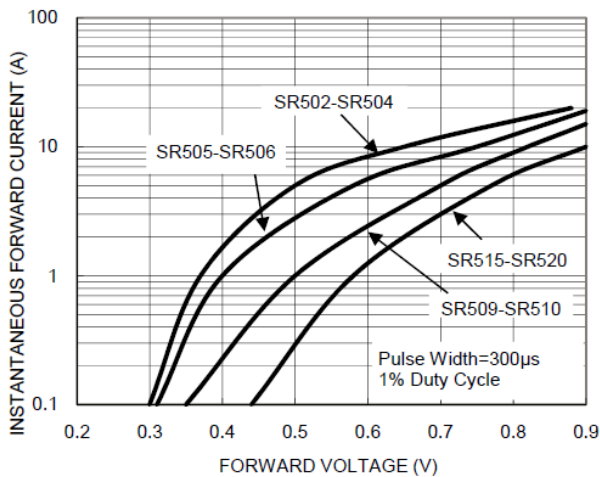


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

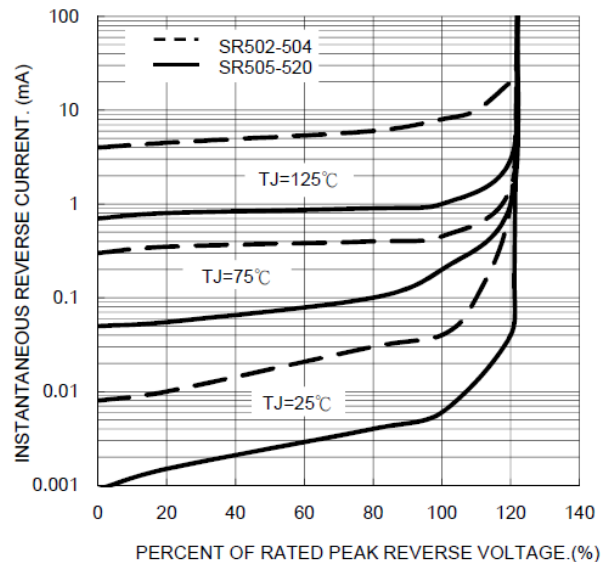


FIG. 5- TYPICAL JUNCTION CAPACITANCE

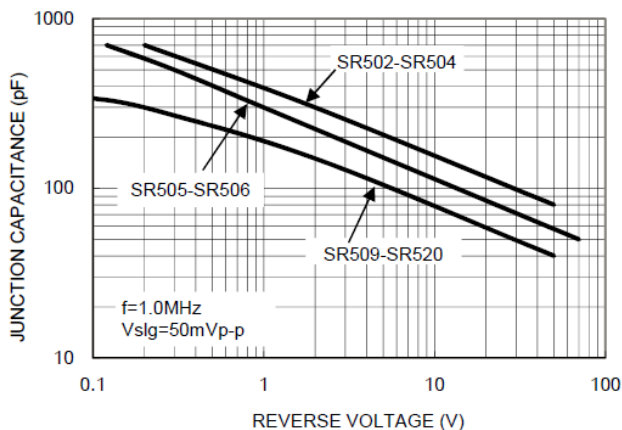
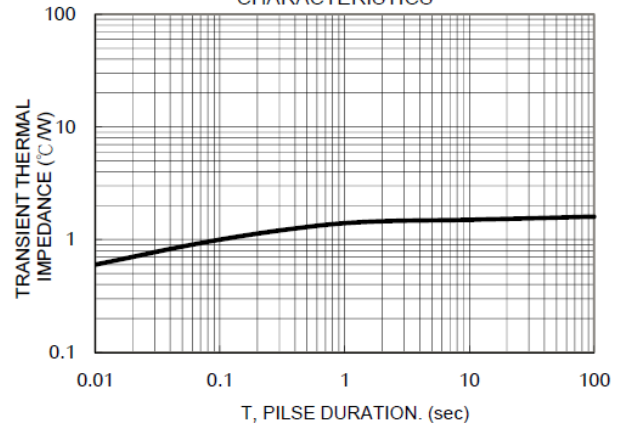


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS





## SR502 THRU SR520

5.0 Amps. Schottky Barrier Rectifiers

### Ordering Information

Part No.	Package	Packing
SR502~SR520	DO-201AD	0.8K/AMMO box
SR502~SR520	DO-201AD	1.2K/AMMO box
SR502~SR520	DO-201AD	1.2K/13" Paper reel
SR502~SR520	DO-201AD	0.5K/Bulk packing