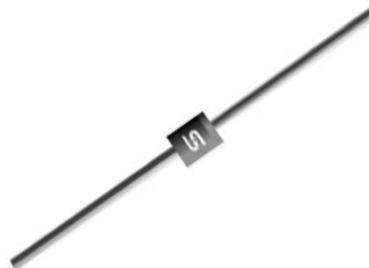


Features

- ✧ 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
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Cases: DO-201AD molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ 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: 1.10 grams

Ordering Information (example)

Part No.	Package	Packing	INNER TAPE	Packing code	Green Compound Packing code
SR802	DO-201AD	500 / AMMO box	52mm	A0	A0G

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

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

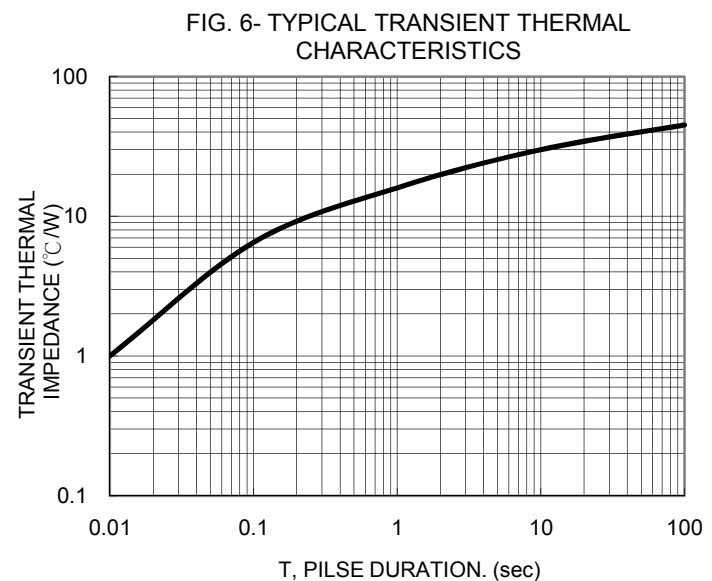
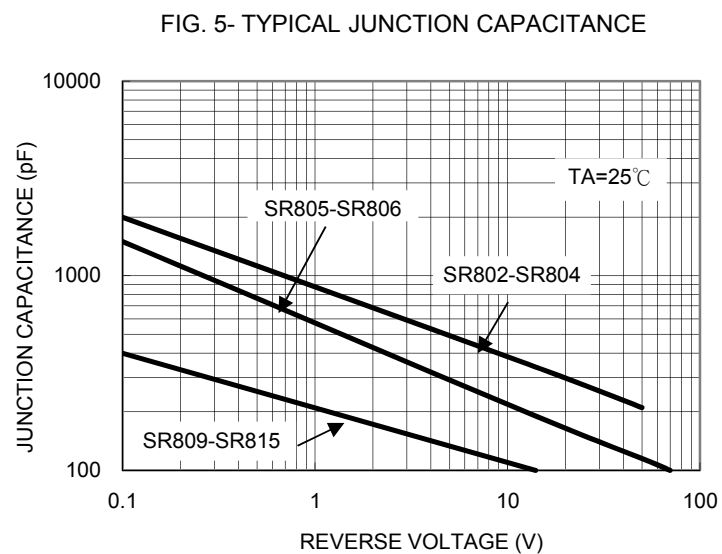
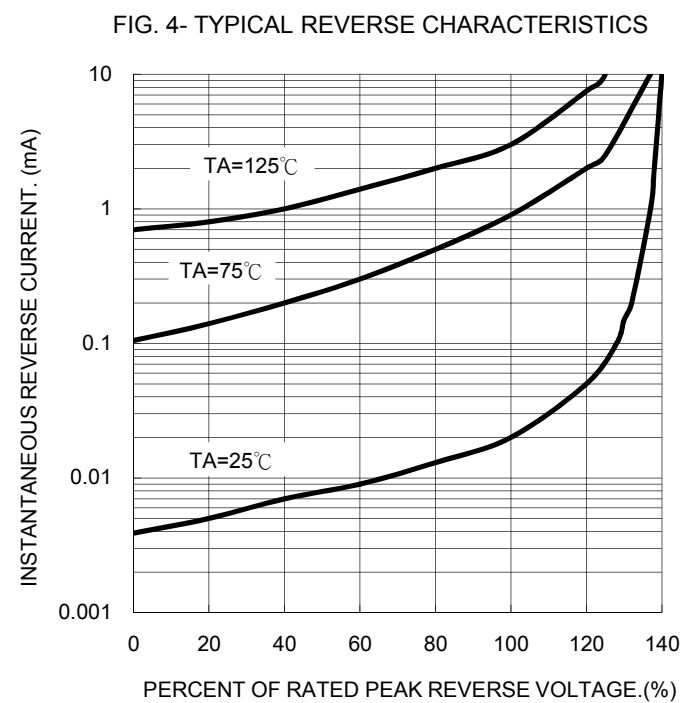
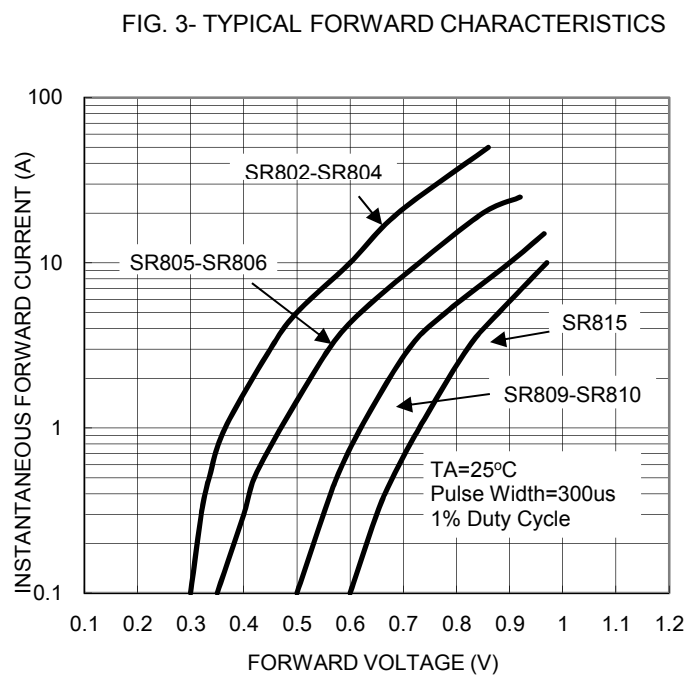
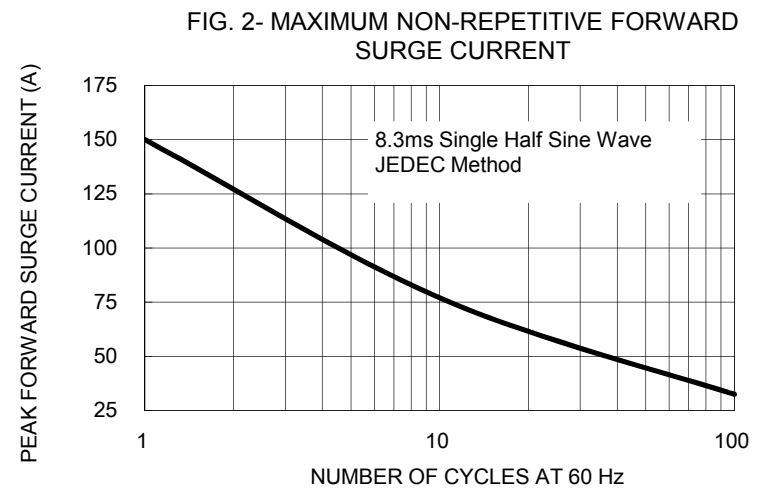
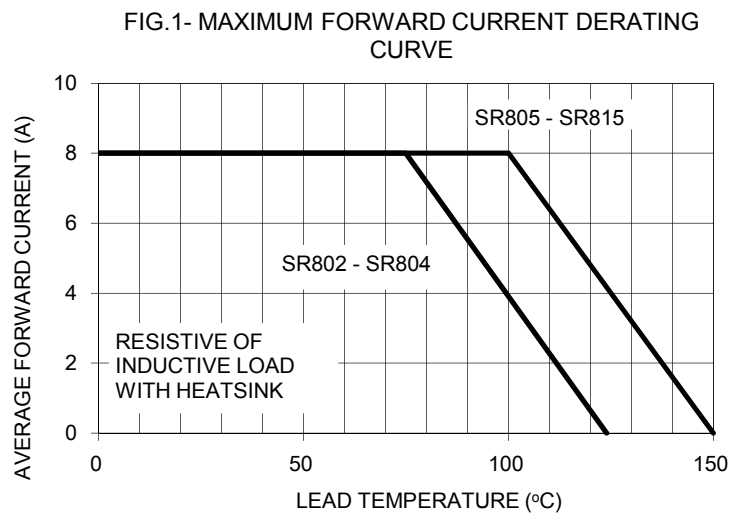
For capacitive load, derate current by 20%

Type Number	Symbol	SR 802	SR 803	SR 804	SR 805	SR 806	SR 809	SR 810	SR 815	Units	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	150	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	105	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	150	V	
Maximum Average Forward Rectified Current	I _{F(AV)}	8								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150								A	
Maximum Instantaneous Forward Voltage (Note 1) @ 8 A	V _F	0.55			0.70		0.92		1.02	V	
Maximum DC Reverse Current @ T _A =25 °C at Rated DC Blocking Voltage @ T _A =100 °C @ T _A =125°C	I _R	0.5					0.1			mA	
		15			10		-				
		-					5				
Typical Junction Capacitance (Note 2)	C _j	500			270		165				pF
Typical Thermal Resistance	R _{θJA}	40								°C/W	
Operating Junction Temperature Range	T _J	- 65 to + 125			- 65 to + 150						°C
Storage Temperature Range	T _{STG}	- 65 to + 150								°C	

Note1: Pulse Test with PW=300 usec, 1% Duty cycle

Note2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SR802 THRU SR815)

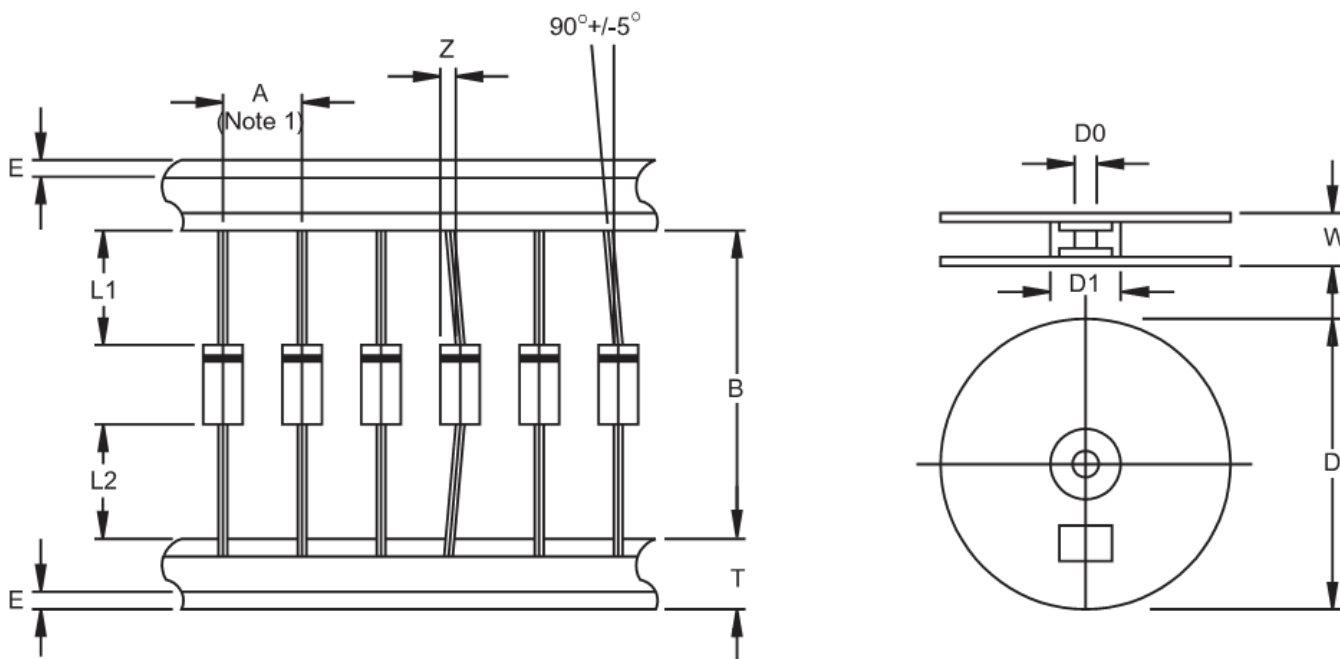


Ordering information

Part No.	Package	Packing	INNER TAPE	Packing code	Green Compound Packing code
SR8xx (Note)	DO-201AD	500 / AMMO box	52mm	A0	A0G
	DO-201AD	1.25K / 13" Reel	52mm	R0	R0G
	DO-201AD	500 / Bulk packing		B0	B0G
	DO-201AD	500 / Bulk packing		X0	X0G

Note: "xx" is Device Code from "02" thru "15".

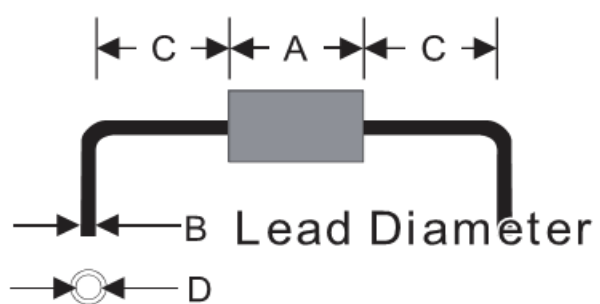
AXIAL LEAD TAPING SPECIFICATIONS



Outline	A	B	Z	T	E	L1-L2	D	D1	D0	W
	±0.5	±1.5	MAX	±0.4	MAX	MAX		±0.3	±0.4	±1.0
DO-201AD	10	52.4	1.2	6	0.8	1	330	85.7	16.6	76

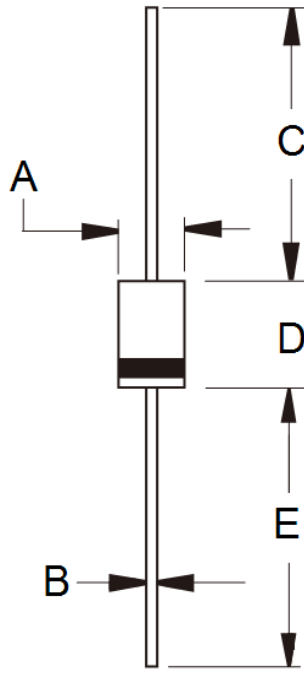
Unit (mm)

Suggested Mounting Hole Rule



Symbol	Unit(mm)
A	9.0
B	1.2
C	4.0
D	1.6

Dimensions



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	5.00	5.60	0.197	0.220
B	1.20	1.30	0.048	0.052
C	25.40	-	1.000	-
D	8.50	9.50	0.335	0.375
E	25.40	-	1.000	-

Marking Diagram



P/N = Specific Device Code
G = Green Compound
YWW = Date Code

Mouser Electronics

Authorized Distributor

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Taiwan Semiconductor:

[SR802](#) [SR803](#) [SR804](#) [SR805](#) [SR806](#) [SR809](#) [SR810](#) [SR815 R0](#)