



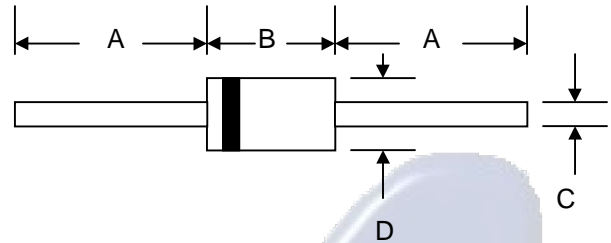
SR520 – SR5100



5.0A SCHOTTKY BARRIER DIODE

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

DO-201AD		
Dim	Min	Max
A	25.4	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	56	70	V
Average Rectified Output Current (Note 1)	I _O	5.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A
Forward Voltage @I _F = 5.0A	V _{FM}	0.55		0.70		0.85			V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	0.5 50							mA
Typical Junction Capacitance (Note 2)	C _j	500			400				pF
Typical Thermal Resistance (Note 1)	R _{θJA}	10							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C

Note: 1. Valid provided that leads are kept 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.

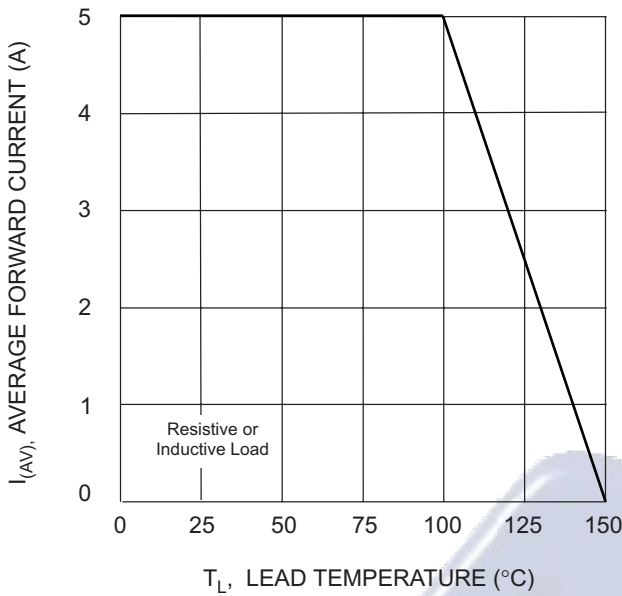


Fig. 1 Forward Current Derating Curve

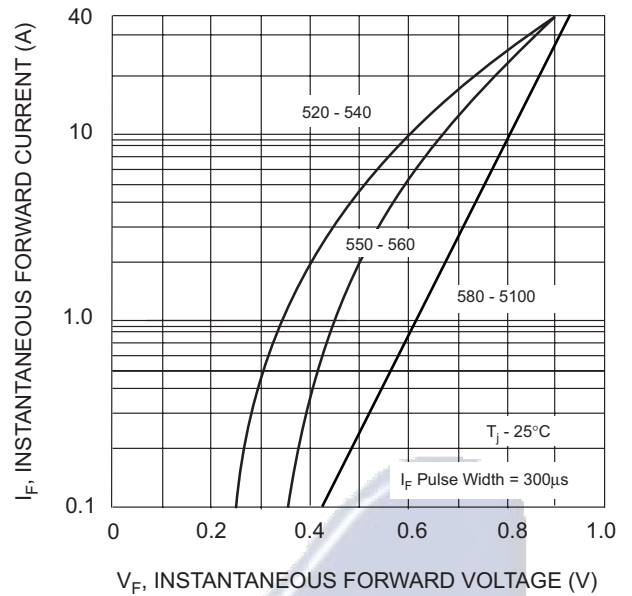


Fig. 2 Typical Forward Characteristics

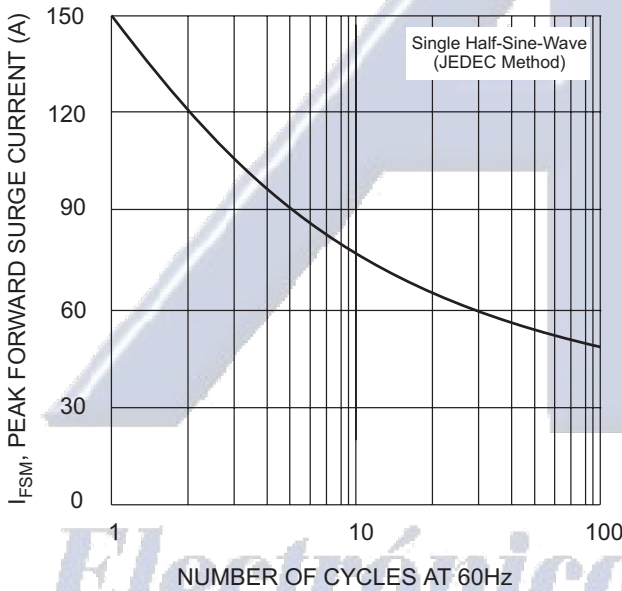


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

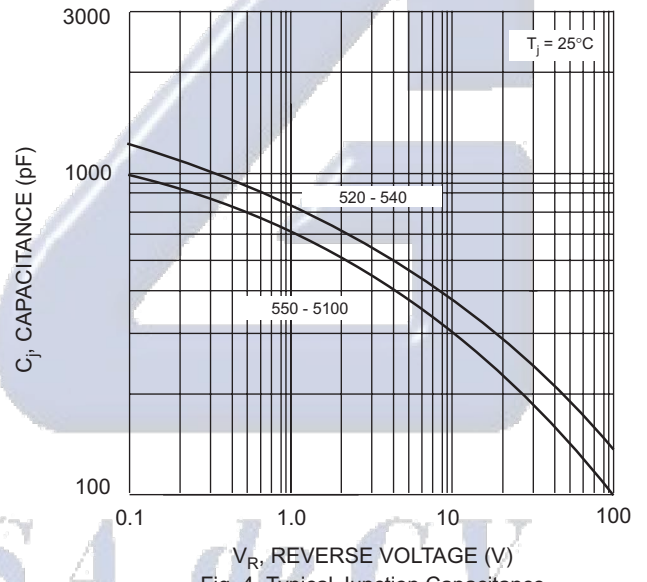


Fig. 4 Typical Junction Capacitance

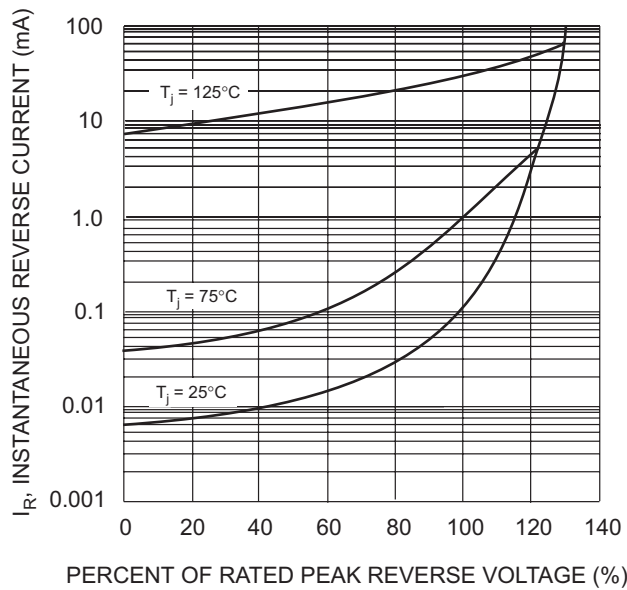
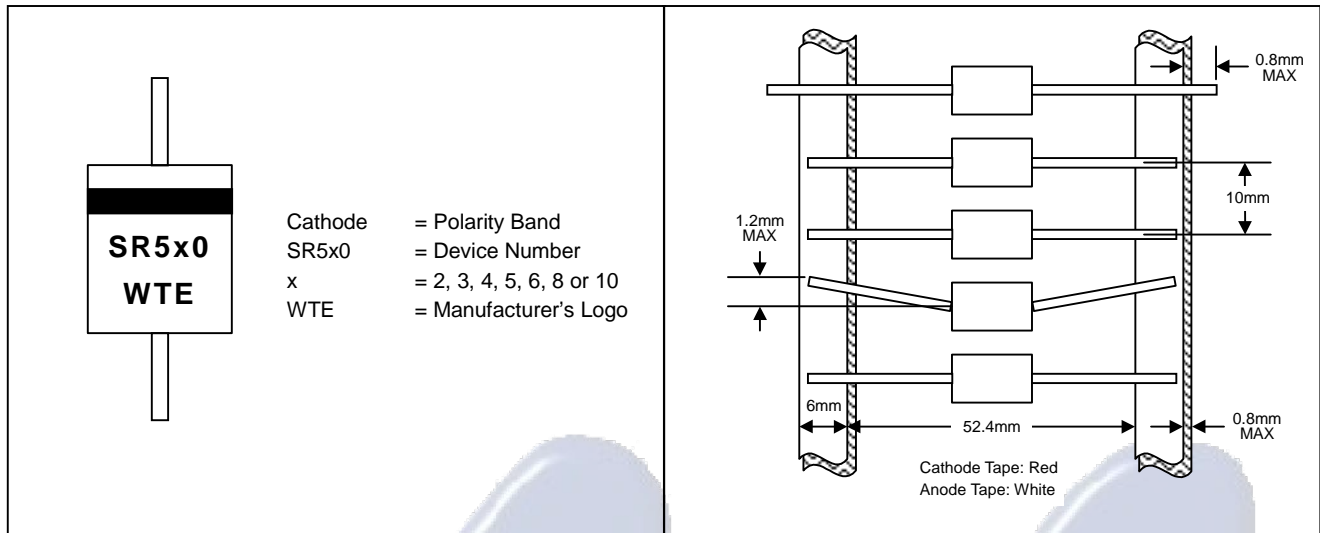


Fig. 5 Typical Reverse Characteristics

MARKING INFORMATION

TAPING SPECIFICATIONS



PACKAGING INFORMATION

The diagram on the left shows a 'TAPE & REEL' with a 330mm diameter and a Product ID Label. The diagram on the right shows a 'TAPE & BOX' with dimensions 150mm x 255mm x 75mm, a Product ID Label, and an Inspection Hole (both ends). Below it is a 'BULK' package with dimensions 40mm x 200mm x 85mm.

Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	1,200	370 x 370 x 420	6,000	10.0
TAPE & BOX	255 x 75 x 150	1,200	400 x 273 x 415	12,000	17.0
BULK	200 x 85 x 40	500	459 x 214 x 256	12,500	16.0

Note: 1. Paper reel, white or gray color. Core material: plastic or metal.
2. Components are packed in accordance with EIA standard RS-296-E.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SR520-T3	DO-201AD	1200/Tape & Reel
SR520-TB	DO-201AD	1200/Tape & Box
SR520	DO-201AD	500 Units/Box
SR530-T3	DO-201AD	1200/Tape & Reel
SR530-TB	DO-201AD	1200/Tape & Box
SR530	DO-201AD	500 Units/Box
SR540-T3	DO-201AD	1200/Tape & Reel
SR540-TB	DO-201AD	1200/Tape & Box
SR540	DO-201AD	500 Units/Box
SR550-T3	DO-201AD	1200/Tape & Reel
SR550-TB	DO-201AD	1200/Tape & Box
SR550	DO-201AD	500 Units/Box
SR560-T3	DO-201AD	1200/Tape & Reel
SR560-TB	DO-201AD	1200/Tape & Box
SR560	DO-201AD	500 Units/Box
SR580-T3	DO-201AD	1200/Tape & Reel
SR580-TB	DO-201AD	1200/Tape & Box
SR580	DO-201AD	500 Units/Box
SR5100-T3	DO-201AD	1200/Tape & Reel
SR5100-TB	DO-201AD	1200/Tape & Box
SR5100	DO-201AD	500 Units/Box

1. Products listed in **bold** are WTE **Preferred** devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SR520-TB-LF.**