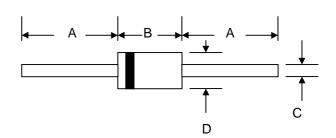


# SR120 - SR160

## 1.0A SCHOTTKY BARRIER RECTIFIER

### **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: Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.34 grams (approx.)

Mounting Position: Any

Marking: Type Number

DO-41						
Dim	Min	Max				
Α	25.4	_				
В	4.06	5.21				
С	0.71	0.864				
D	2.00	2.72				
All Dimensions in mm						

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	SR120	SR130	SR140	SR150	SR160	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	V
Average Rectified Output Current (Note 1) @T <sub>L</sub> = 100	C Io	1.0					Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	40				Α	
Forward Voltage $@I_F = 1.$	0A VFM	0.50 0.70			70	V	
	I IDM			0.5 10			mA
Typical Junction Capacitance (Note 2)	Cj	110			8	0	pF
Typical Thermal Resistance Junction to Lead	R⊕JL	15				K/W	
Typical Thermal Resistance Junction to Ambient (Note 1)	RθJA	50				K/W	
Operating and Storage Temperature Range	Тj, Tsтg	-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.

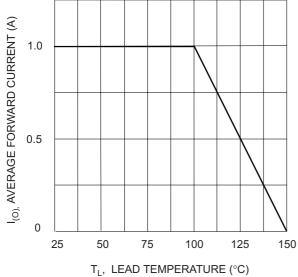
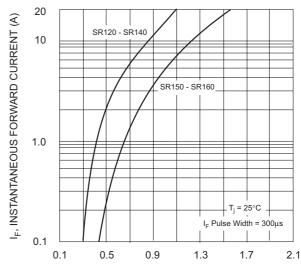
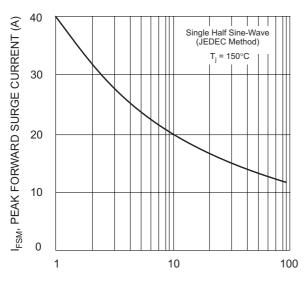


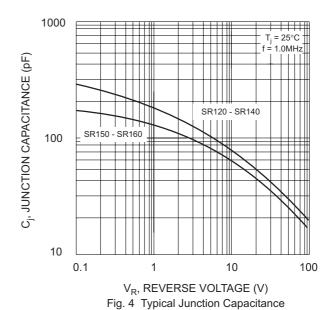
Fig. 1 Forward Current Derating Curve



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



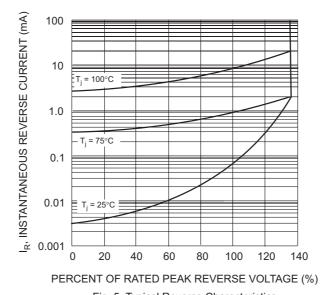


Fig. 5 Typical Reverse Characteristics

#### **ORDERING INFORMATION**

Product No.◆	Package Type	Shipping Quantity		
SR120-T3	DO-41	5000/Tape & Reel		
SR120-TB	DO-41	5000/Tape & Box		
SR120	DO-41	1000 Units/Box		
SR130-T3	DO-41	5000/Tape & Reel		
SR130-TB	DO-41	5000/Tape & Box		
SR130	DO-41	1000 Units/Box		
SR140-T3	DO-41	5000/Tape & Reel		
SR140-TB	DO-41	5000/Tape & Box		
SR140	DO-41	1000 Units/Box		
SR150-T3	DO-41	5000/Tape & Reel		
SR150-TB	DO-41	5000/Tape & Box		
SR150	DO-41	1000 Units/Box		
SR160-T3	DO-41	5000/Tape & Reel		
SR160-TB	DO-41	5000/Tape & Box		
SR160	DO-41	1000 Units/Box		

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com



Products listed in **bold** are WTE **Preferred** devices.

T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.