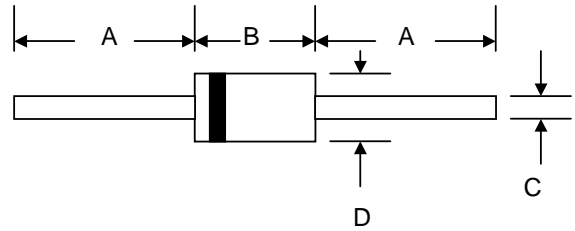


Features

- 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 @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	SD1030	SD1035	SD1040	SD1045	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	35	40	45	V
Working Peak Reverse Voltage	V_{RWM}					
DC Blocking Voltage	V_R					
RMS Reverse Voltage	$V_{R(RMS)}$	21	25	28	32	V
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$ (Note 1)	I_o	10				A
Non-Repetitive Peak Forward Surge Current 10ms Single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	340				A
Forward Voltage @ $I_F = 10\text{A}$	V_{FM}	0.55				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	0.8 70				mA
Typical Junction Capacitance (Note 2)	C_j	900				pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	8.0				$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150				$^\circ\text{C}$

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.

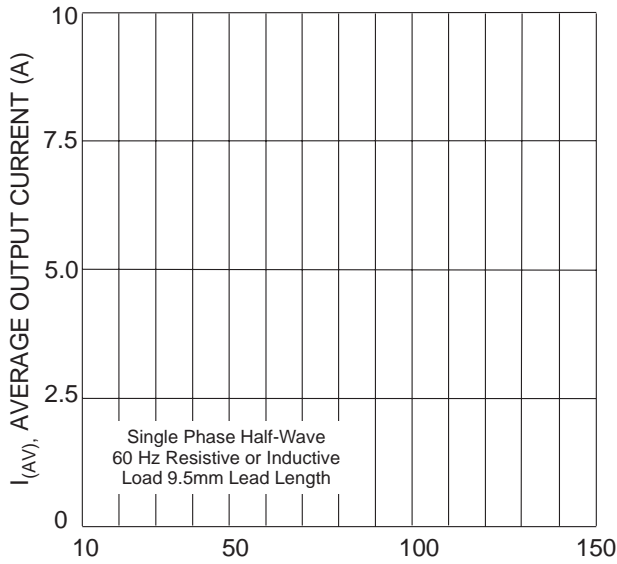


Fig. 1 Forward Current Derating Curve

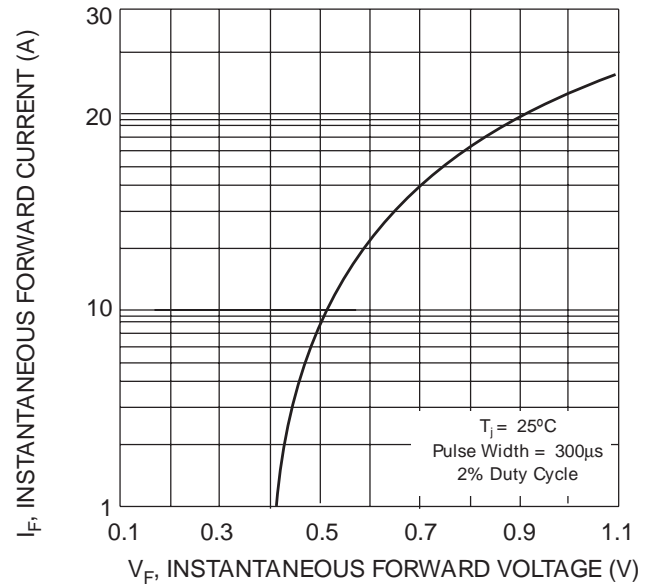


Fig. 2 Typical Forward Voltage Characteristics

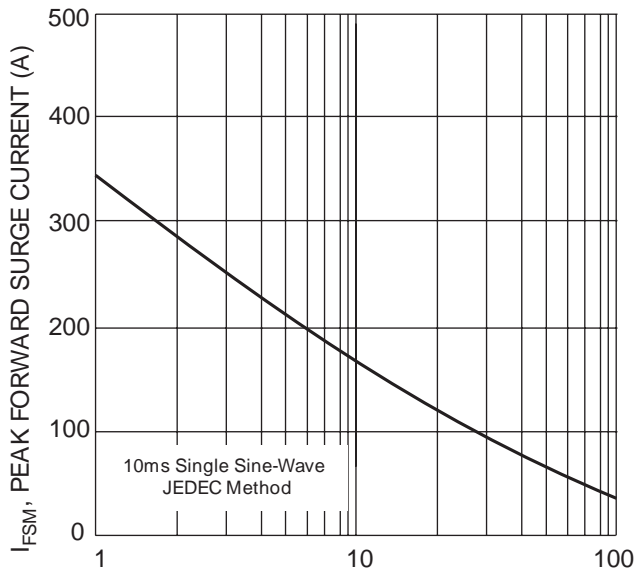


Fig. 3 Peak Forward Surge Current

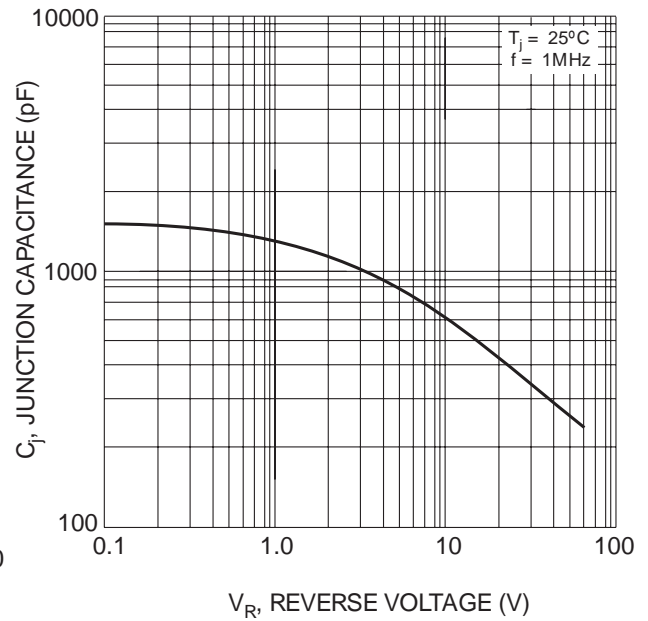
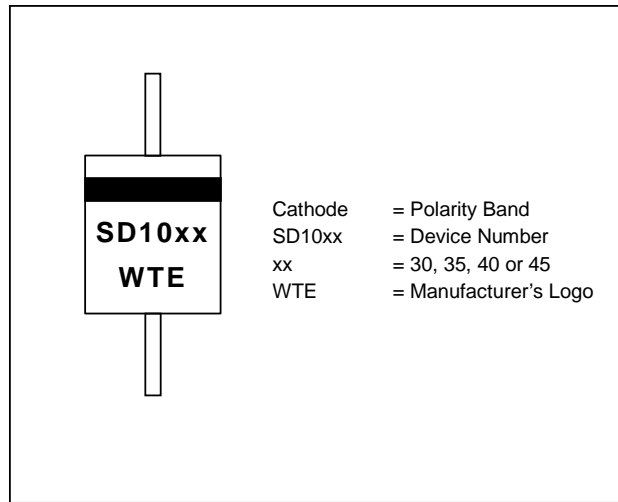
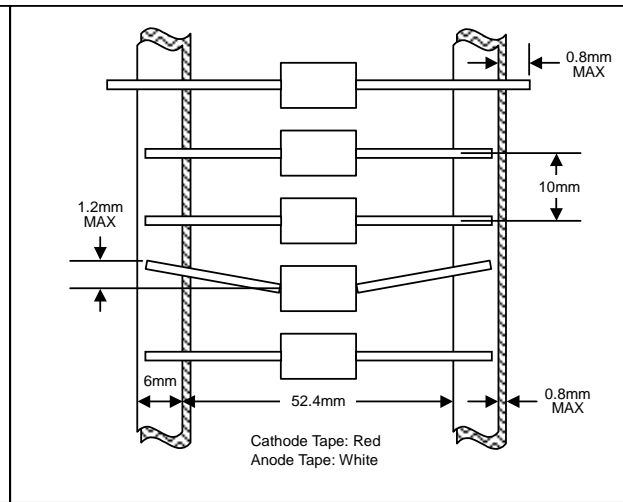


Fig. 4 Typical Junction Capacitance

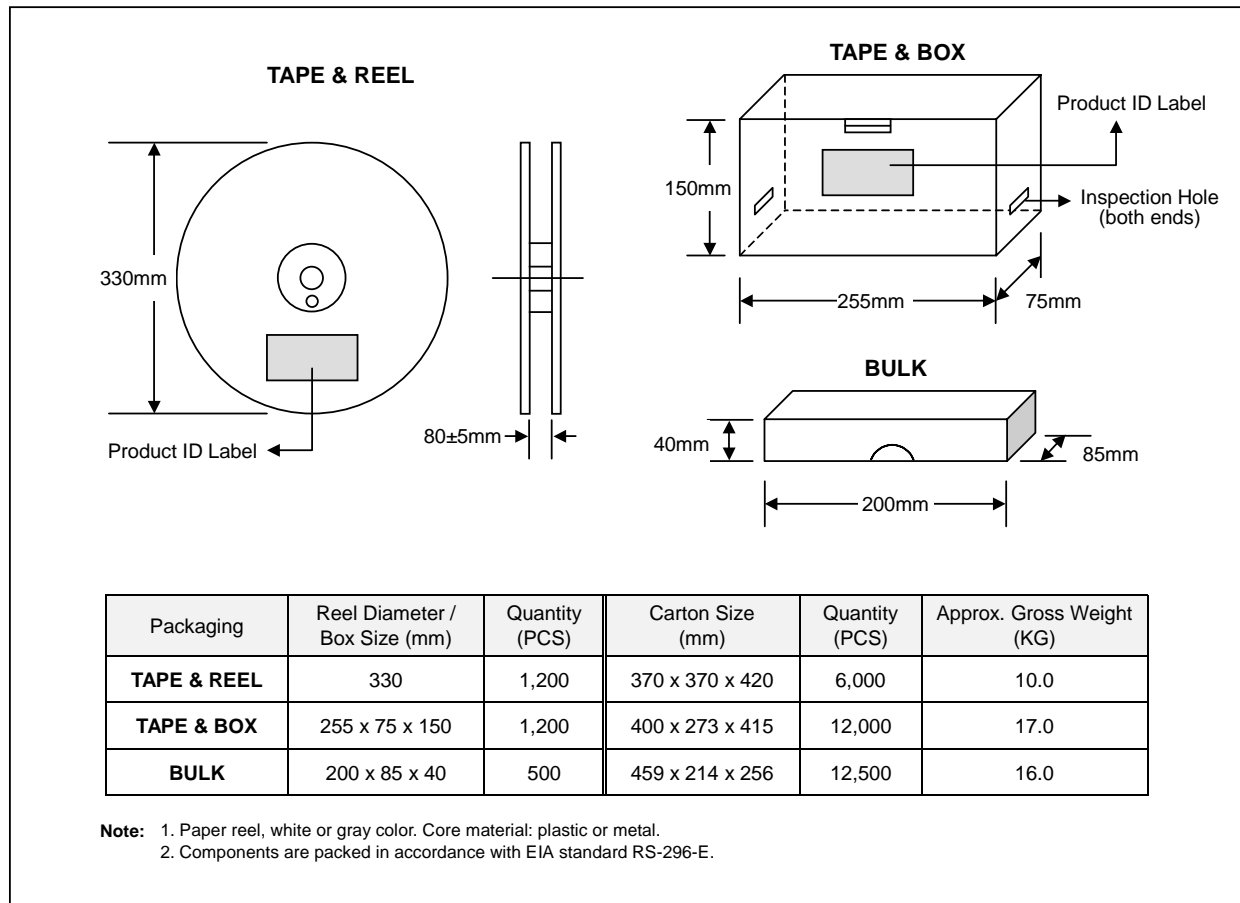
MARKING INFORMATION



TAPING SPECIFICATIONS



PACKAGING INFORMATION



ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SD1030-T3	DO-201AD	1200/Tape & Reel
SD1030-TB	DO-201AD	1200/Tape & Box
SD1030	DO-201AD	500 Units/Box
SD1035-T3	DO-201AD	1200/Tape & Reel
SD1035-TB	DO-201AD	1200/Tape & Box
SD1035	DO-201AD	500 Units/Box
SD1040-T3	DO-201AD	1200/Tape & Reel
SD1040-TB	DO-201AD	1200/Tape & Box
SD1040	DO-201AD	500 Units/Box
SD1045-T3	DO-201AD	1200/Tape & Reel
SD1045-TB	DO-201AD	1200/Tape & Box
SD1045	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, SD1030-TB-LF.**

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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.

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We power your everyday.