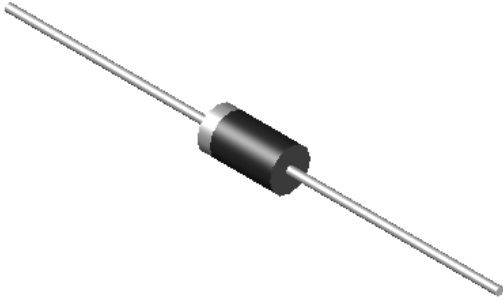


Schottky Barrier Rectifier

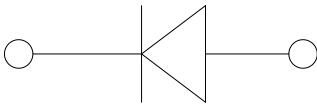


Features

- Guardring for overvoltage protection
- Low power loss
- Extremely fast switching
- High forward surge capability
- High frequency operation
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.



Mechanical Data

- **Package:** DO-201AD (DO-27)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes the cathode end

■ Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SR520	SR540	SR560	SR5100	SR5150	SR5200
Device marking code			SR520	SR540	SR560	SR5100	SR5150	SR5200
Repetitive Peak Reverse Voltage	V _{RRM}	V	20	40	60	100	150	200
Average Rectified Output Current @60Hz sine wave, Resistance load, T _a (FIG.1)	I _O	A	5.0					
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	120					
Storage Temperature	T _{stg}	°C	-55 ~+150					
Junction Temperature	T _j	°C	-55 ~+125			-55 ~+150		

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SR520	SR540	SR560	SR5100	SR5150	SR5200
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =5.0A	0.55		0.7	0.85		
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	mA	T _a =25°C	0.2			0.1		
			T _a =100°C	20			5		
Typical junction capacitance	C _j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	280		220	180	100	



SR520 THRU SR5200

■ Thermal Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	SR5200
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}\text{C}/\text{W}$	20								

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SR520~SR5200	D1	Approximate 1.05	1250	1250	12500	Tape
SR520~SR5200	C1	Approximate 1.05	250	250	12500	Bulk

■ Characteristics (Typical)

FIG.1: I_o - T_a Curve

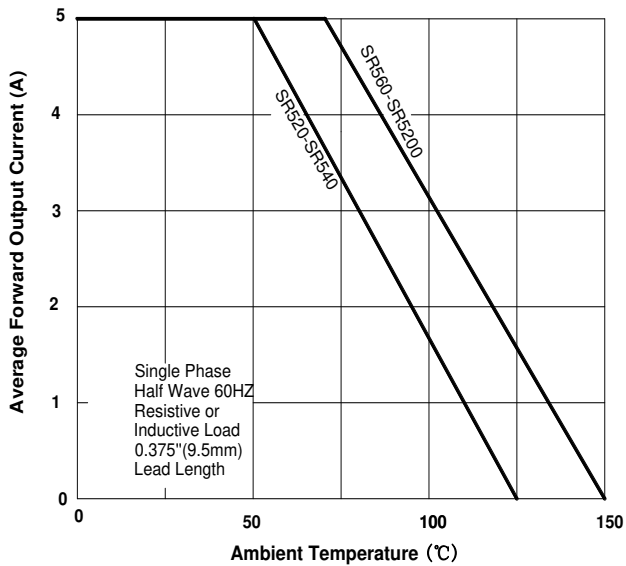


FIG.2: Forward Surge Current Capability

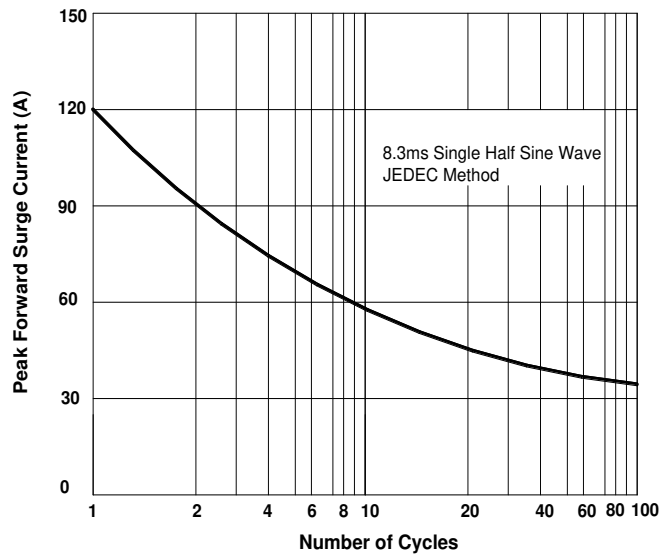


FIG.3: Forward Voltage

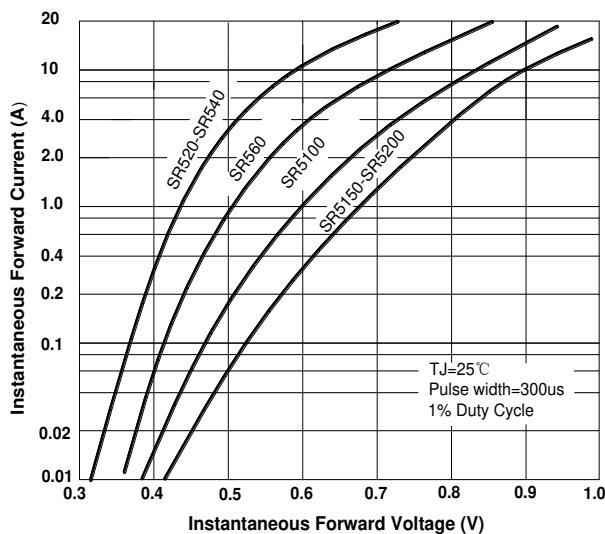
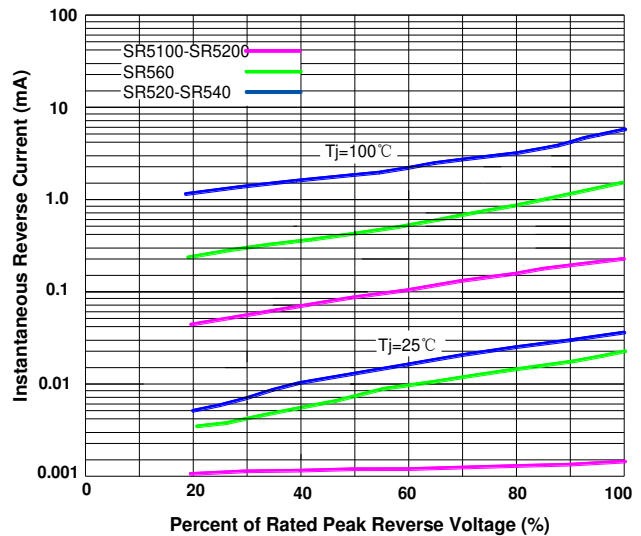
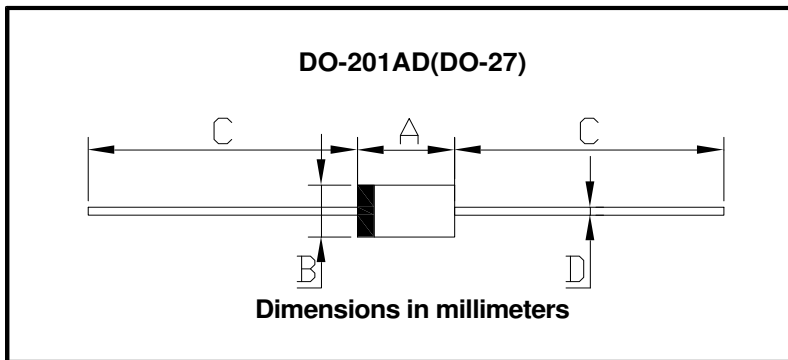


FIG.4: Typical Reverse Characteristics





■ Outline Dimensions



DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30



SR520 THRU SR5200

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