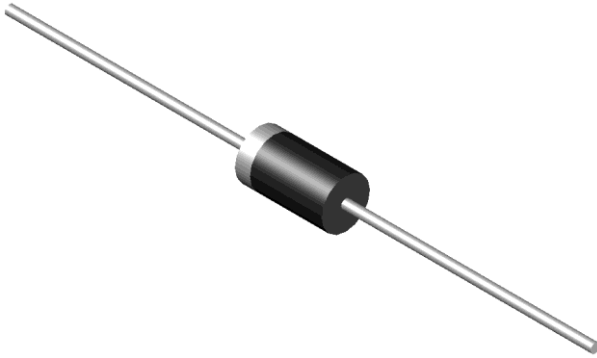




Schottky Barrier Rectifier

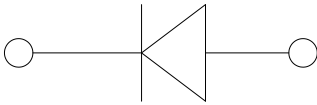


Features

- Guardring for overvoltage protection
- Low forward voltage drop, Low power losses
- 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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SR540L	SR560L	SR5100L
Device marking code			SR540L	SR560L	SR5100L
Repetitive Peak Reverse Voltage	VRRM	V	40	60	100
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	IO	A	5.0		
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	IFSM	A	80		
Storage Temperature	Tstg	°C	-55 ~+150		
Junction Temperature	Tj	°C	-55 ~+125	-55 ~+150	

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SR540L	SR560L	SR5100L
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=5.0A	0.48	0.49	0.7
Maximum DC reverse current at rated DC blocking voltage per diode	IR	mA	Ta=25°C	0.2		0.1
			Ta=100°C	50		
Typical junction capacitance	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	330	420	190

Note

(1) Typical junction capacitance measured at 1MHZ and applied reverse voltage of 4.0 V.D.C.



SR540L THRU SR5100L

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

PARAMETER		SYMBOL	UNIT	SR540L	SR560L	SR5100L
Thermal Resistance	Junction to ambient	R _{θJ-A}	°C/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
SR540L~SR5100L	D1	Approximate 1.05	1250	1250	12500	Tape
SR540L~SR5100L	C1	Approximate 1.05	250	250	12500	Bulk

■ Characteristics(Typical)

FIG.1: I_o-T_a Curve

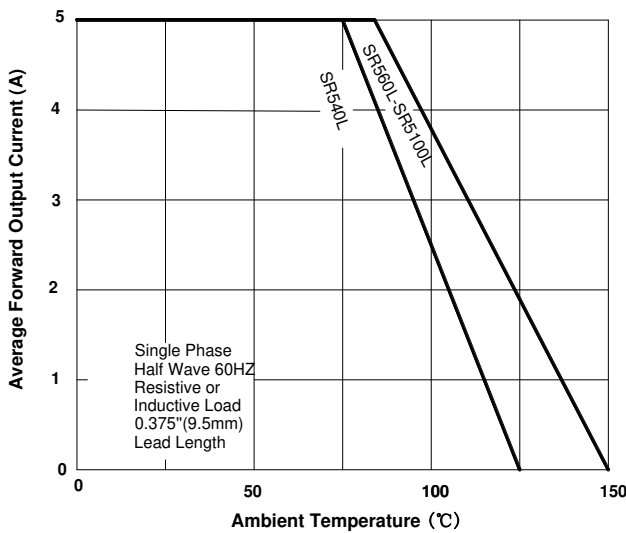


FIG.2: Forward Surge Current Capability

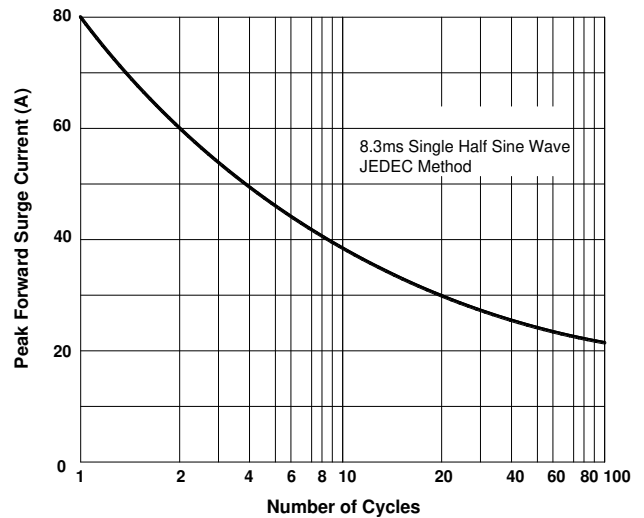


FIG.3: Forward Voltage

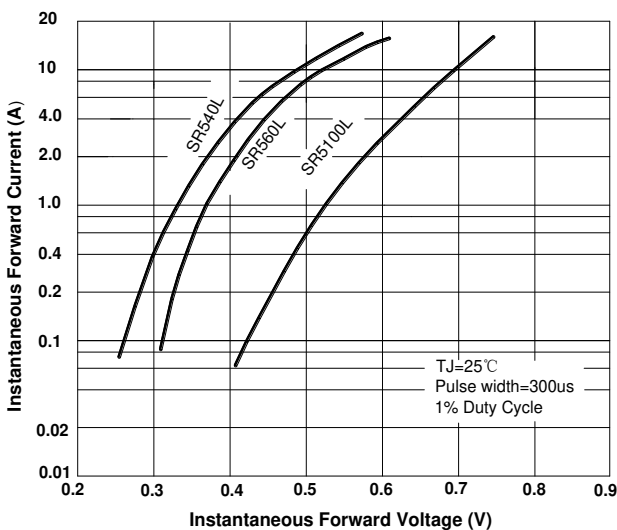
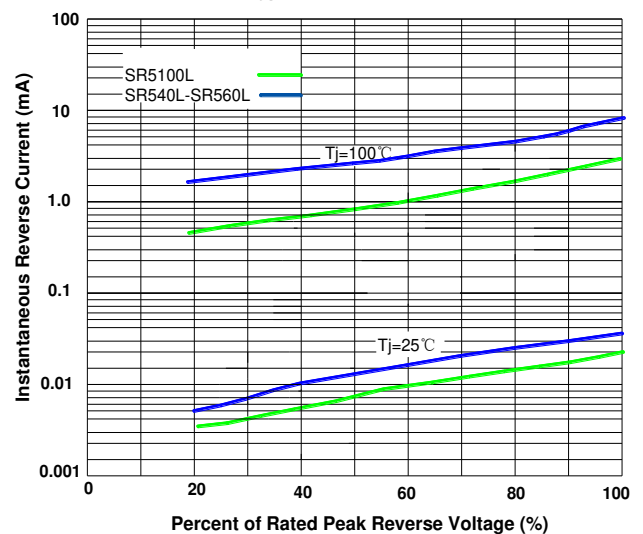


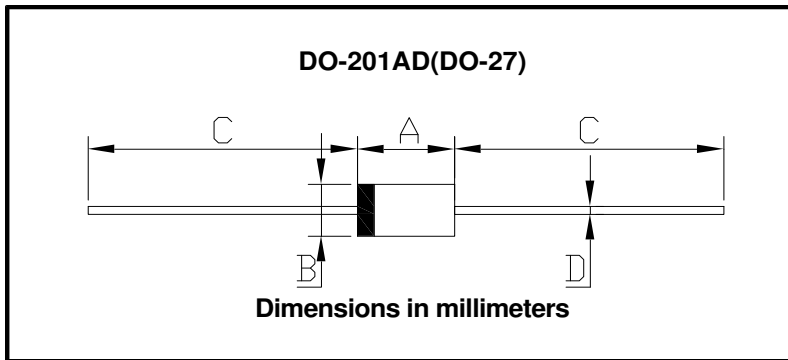
FIG.4: Typical Reverse Characteristics





SR540L THRU SR5100L

■ Outline Dimensions



DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.2	1.3



SR540L THRU SR5100L

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