

Schottky Barrier Rectifier

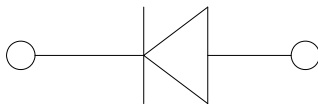


Features

- 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-204AL(DO-41)
Molding compound meets UL 94 V-0 flammability rating, -
- **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	SR140L	SR160L	SR1100L
Device marking code			SR140L	SR160L	SR1100L
Repetitive Peak Reverse Voltage	VRRM	V	40	60	100
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	IO	A	1.0		
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	IFSM	A	25		
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	SR140L	SR160L	SR1100L
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.0A	0.45	0.48	0.7
Maximum DC reverse current at rated DC blocking voltage per diode	IR	mA	Ta=25°C	0.2		
			Ta=100°C	20		
Typical junction capacitance@4V,1MHz	Cj	pF		80	70	60

Note1:Pulse test:300uS pulse width,1% duty cycle

Note2:Pulse test:pulse width 40mS

SR140L THRU SR1100L

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

PARAMETER		SYMBOL	UNIT	SR140L	SR160L	SR1100L
Thermal Resistance	Junction to ambient	R _{θJ-A}	°C/W	50		

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SR140L~SR1100L	D1	Approximate 0.27	Approximate 5000	5000	50000	Tape
SR140L~SR1100L	C1	Approximate 0.27	Approximate 1000	1000	50000	Bulk

■ Characteristics(Typical)

FIG.1: I_o-T_a Curve

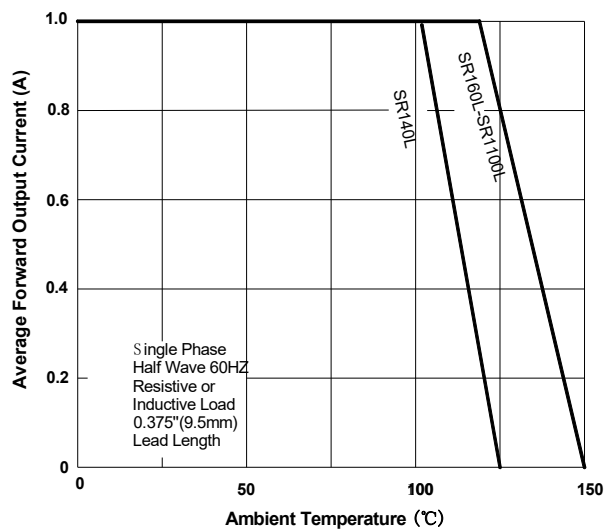


FIG.2: Forward Surge Current Capability

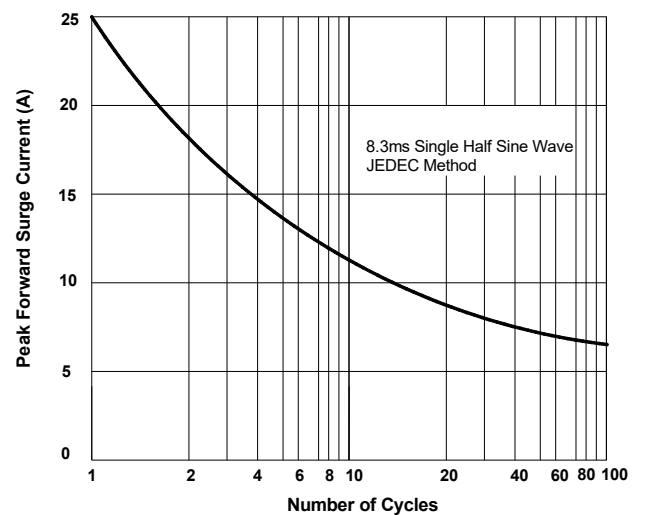


FIG.3: Forward Voltage

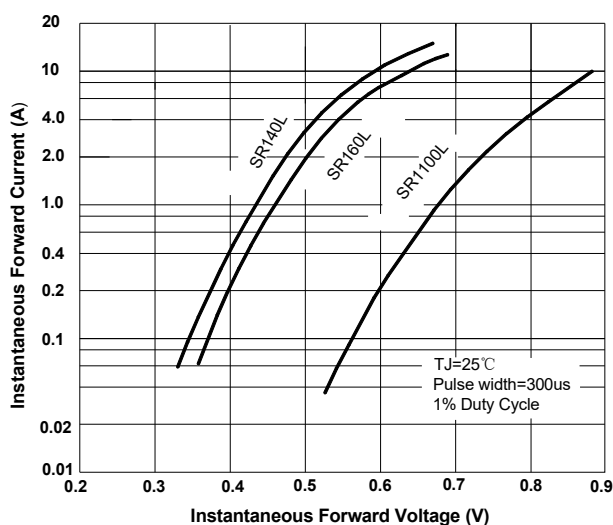
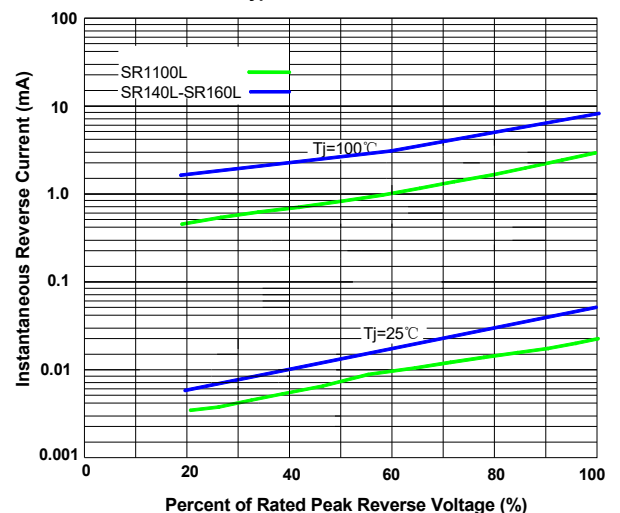
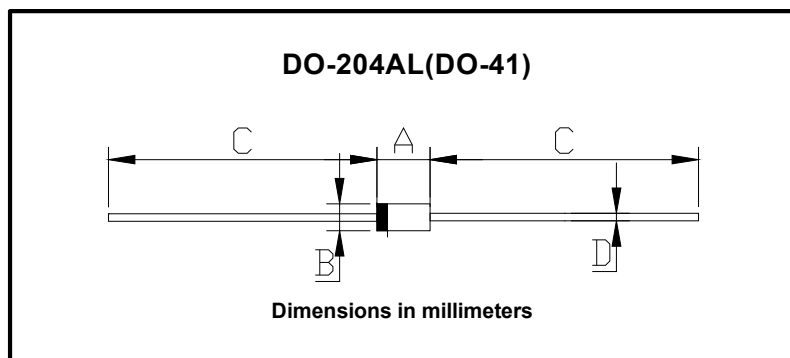


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions



DO-204AL(DO-41)		
Dim	Min	Max
A	4.22	5.21
B	2.03	2.72
C	25.4	/
D	0.69	0.86

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