

Schottky Barrier Rectifier

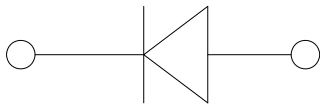


Features

- 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-204AC(DO-15)
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	SR220	SR240	SR260	SR2100	SR2150	SR2200
Device marking code			SR220	SR240	SR260	SR2100	SR2150	SR2200
Repetitive Peak Reverse Voltage	V_{RRM}	V	20	40	60	100	150	200
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	I_O	A	2.0					
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Ta=25°C	I_{FSM}	A	50					
Storage Temperature	T_{stg}	°C	-55 ~+175					
Junction Temperature	T_j	°C	-55 ~+125			-55 ~+175		

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SR220	SR240	SR260	SR2100	SR2150	SR2200
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=2.0A$	0.55		0.7	0.85		
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	mA	Ta=25°C	0.2			0.1		
			Ta=100°C	20			5		
Typical junction capacitance	C_j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	100		80		50	

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

Note2:Pulse test:pulse width 40mS

SR220 THRU SR2200

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

PARAMETER	SYMBOL	UNIT	SR220	SR230	SR240	SR250	SR260	SR280	SR2100	SR2150	SR2200
Thermal Resistance	R _{θJA}	°C/W	45								

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SR220~SR2200	D1	Approximate 0.38	3000	3000	30000	Tape
SR220~SR2200	C1	Approximate 0.38	500	500	25000	Bulk

■ Characteristics(Typical)

FIG.1: I_o-T_a Curve

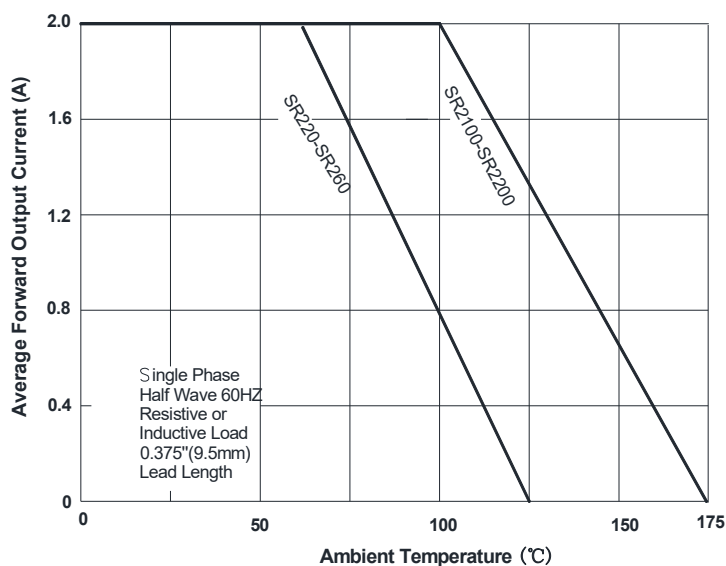


FIG.2: Forward Surge Current Capability

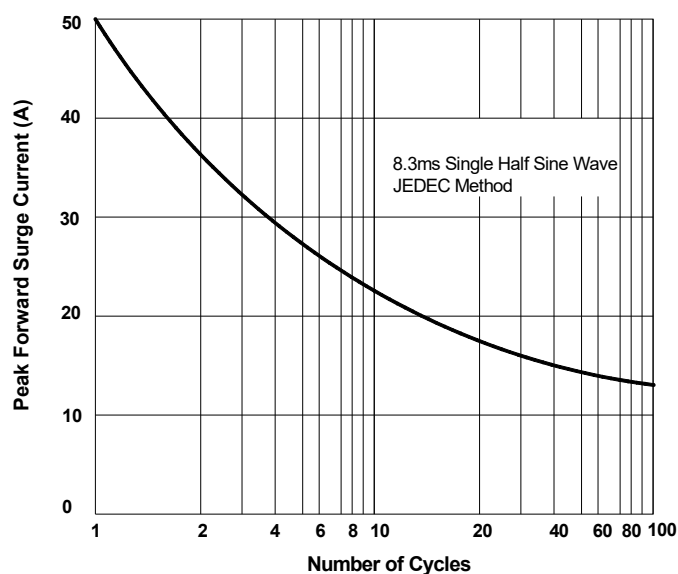


FIG.3: Forward voltage

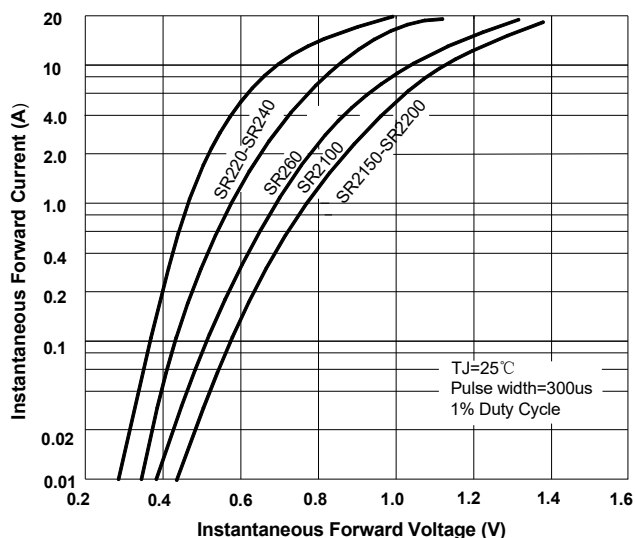
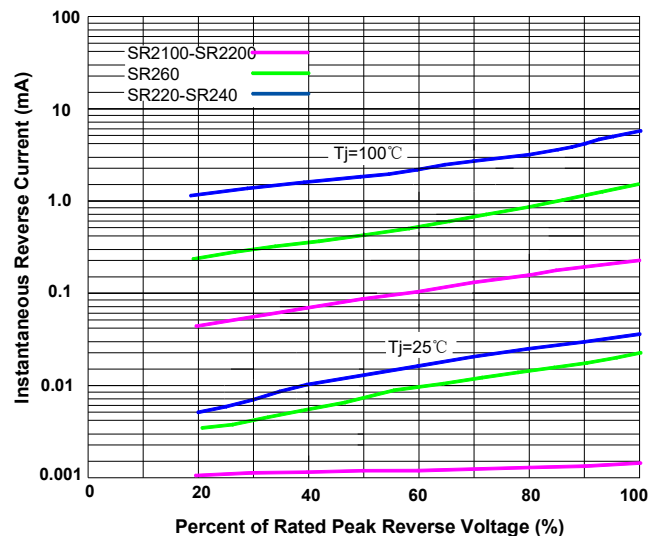
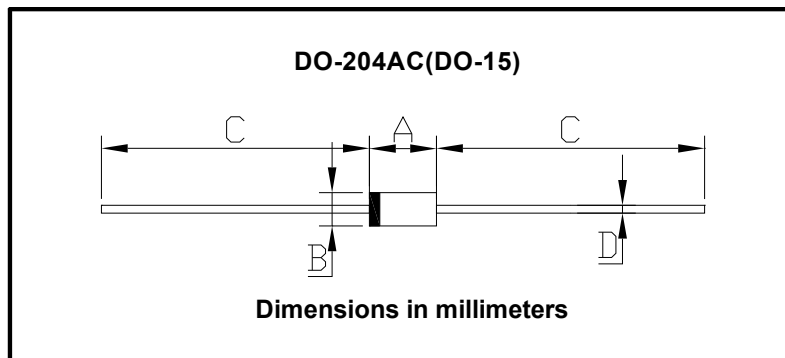


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions



DO-204AC(DO-15)		
Dim	Min	Max
A	5.80	7.60
B	2.60	3.60
C	25.4	/
D	0.70	0.90

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