



SR1020C thru SR10200C



Schottky Barrier Rectifiers



TO-220AB

Features

- Guard Ring for over voltage Protection
- High forward surge capability
- High frequency operation
- Component in accordance to RoHS 2002/95/EC

Ordering Information

Part No.	Package	Packing
SR10xxC	TO-220AB	50 & 2000 / Tube & Box

Device P/N

Part Number	Remark
SR10xxC	General
SR10xxC-H	Halogen Free

Primary Characteristics

I_F	10	A
V_{RRM}	20~200	V
I_{FSM}	100	A
V_F	0.55、0.70、0.85、0.92	V
T_J max	125、150	°C

Mechanical Data

- Case: TO-220AB
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe.Solderable per MIL-STD-202, Method 208
- Weight: 2.015 grams (approximate)

Maximum Ratings (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	SR10 20C	SR10 30C	SR10 40C	SR10 45C	SR10 50C	SR10 60C	SR10 80C	SR10 100C	SR10 150C	SR10 200C	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V	
Maximum average forward rectified current (Total) (Per Leg)	I_F	10 5										A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100.0										A	
Maximum Instantaneous Forward Voltage $I_F=5A @ 25^\circ C$	V_F	0.55			0.70			0.85		0.92		V	
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	I_R	0.5 20						0.2 5				mA	
Typical Junction Capacitance(NOTE1)	C_j	290				220			160	150	110	pF	
Typical Thermal Resistance	$R_{\theta JC}$	3											°C/W
Operating Temperature Range	T_J	-55 to +125						-55 to +150					°C
Storage Temperature Range	T_{STG}	-55 to +150											°C
Marking Code		SR10 20C	SR10 30C	SR10 40C	SR10 45C	SR10 50C	SR10 60C	SR10 80C	SR10 100C	SR10 150C	SR10 200C		

NOTES:

1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC



Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

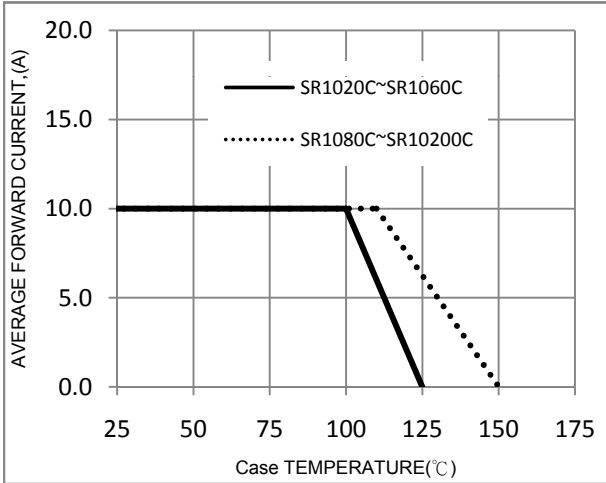


FIG. 2-Typical Forward Characteristics

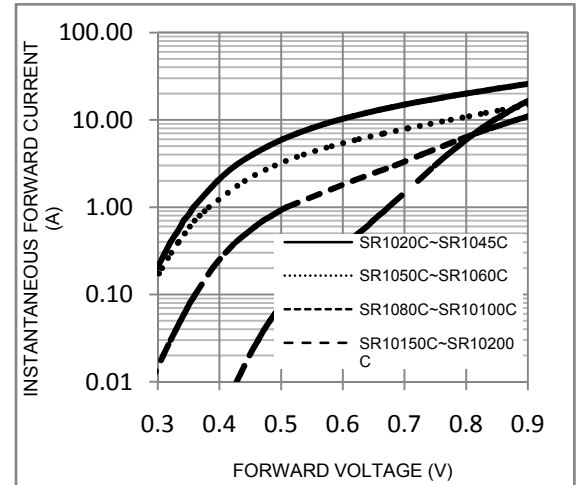


FIG. 3-Maximum Non-Repetitive Forward Surge Current

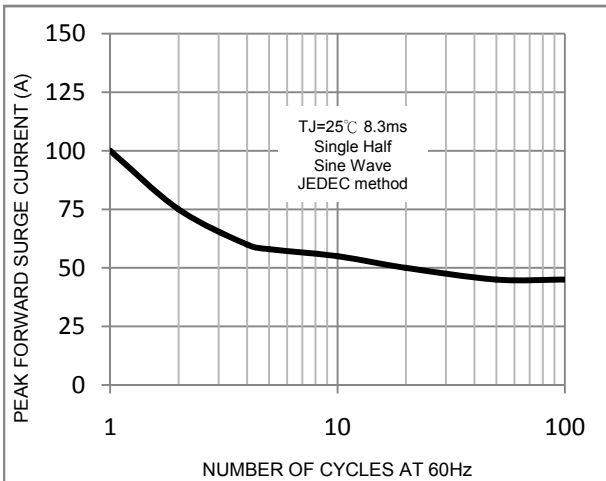


FIG. 4-Typical Reverse Characteristics

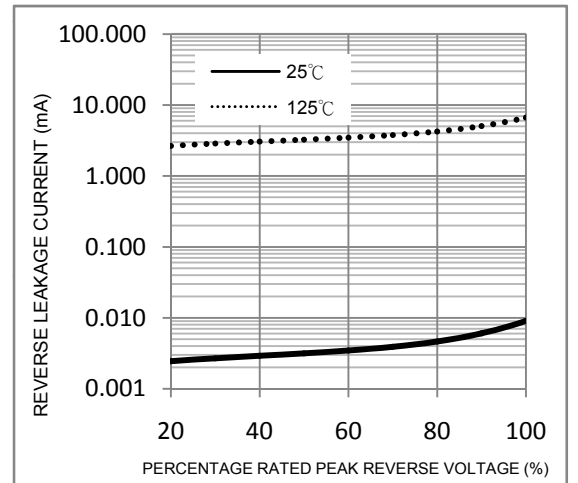
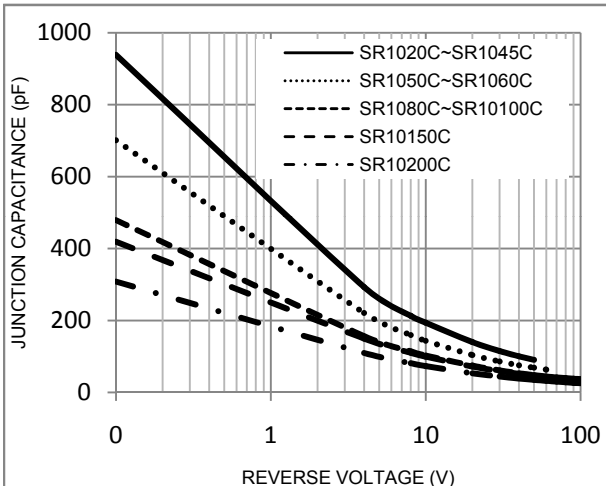
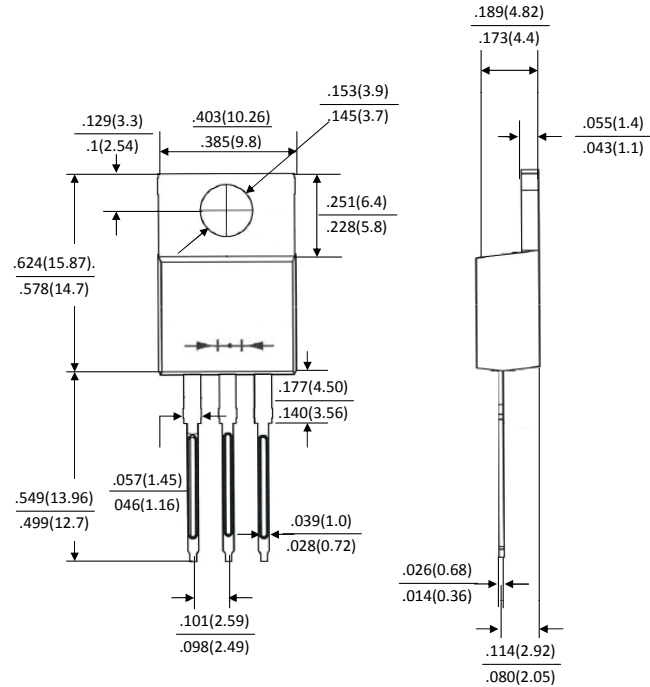


FIG. 5-Typical Junction Capacitance





Package Outline Dimensions



TO-220AB

Dimensions in inches and (millimeters)

Marking Information

