

## 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

## Schottky Barrier Rectifiers

### Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

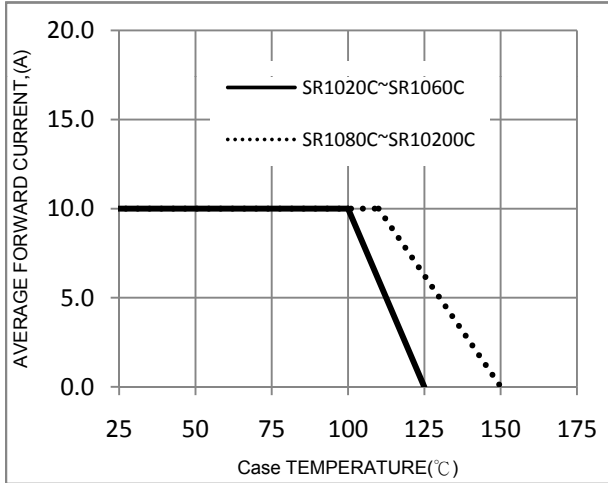


FIG. 2-Typical Forward Characteristics

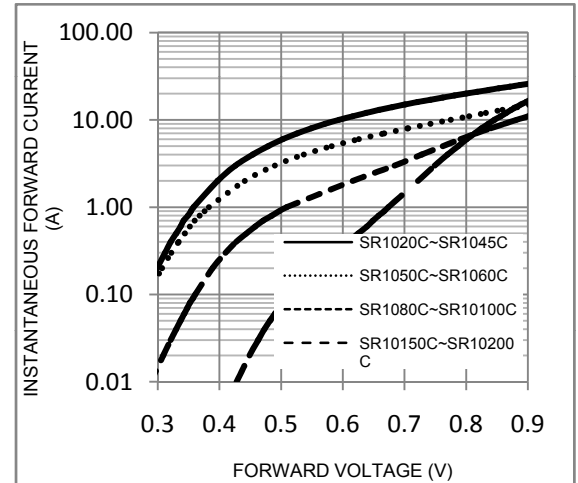


FIG. 3-Maximum Non-Repetitive Forward Surge Current

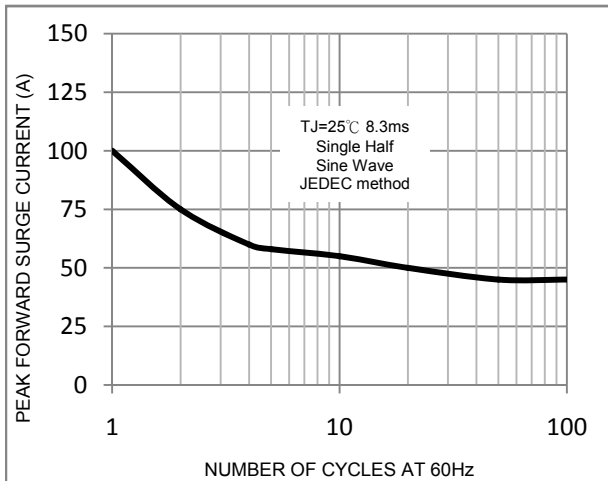


FIG. 4-Typical Reverse Characteristics

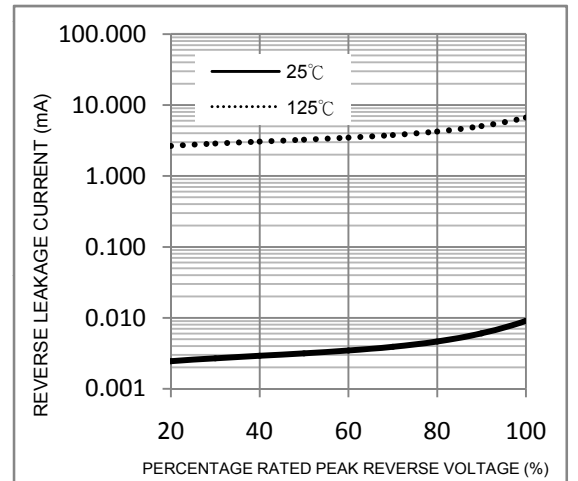
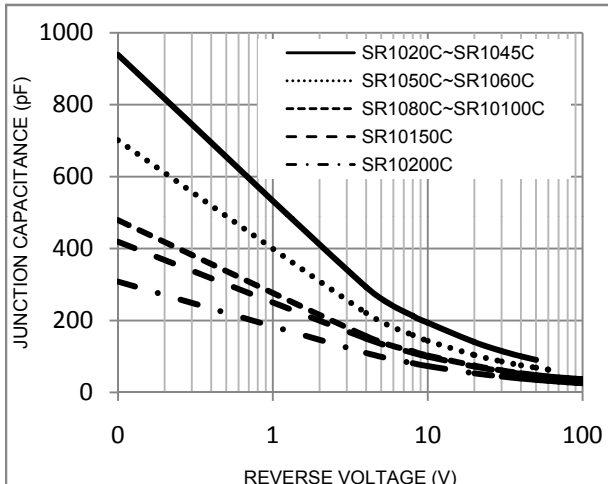
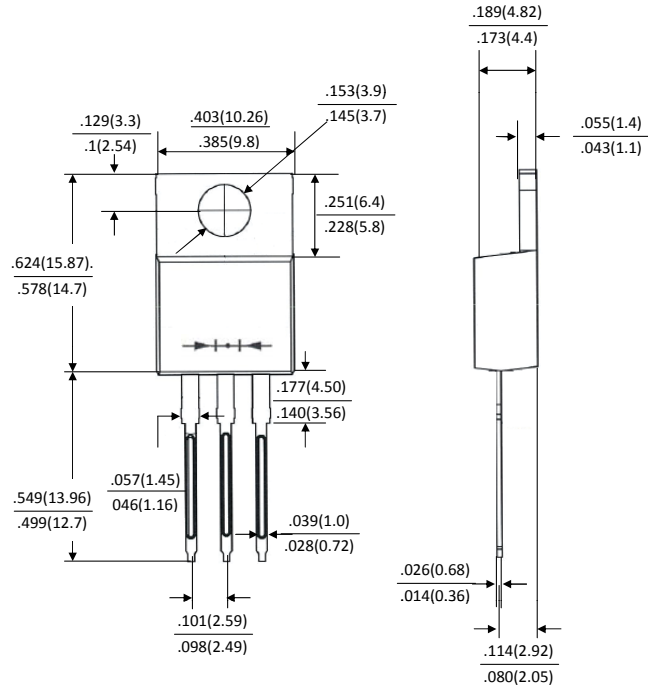


FIG. 5-Typical Junction Capacitance



### Package Outline Dimensions



### TO-220AB

Dimensions in inches and (millimeters)

### Marking Information

