



SR2020C thru SR20200C



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
SR20xxC	TO-220AB	50 & 2000 / Tube & Box

Device P/N

Part Number	Remark
SR20xxC	General
SR20xxC-H	Halogen Free

Primary Characteristics

I_F	20	A
V_{RRM}	20~200	V
I_{FSM}	150	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	SR20 20C	SR20 30C	SR20 40C	SR20 45C	SR20 50C	SR20 60C	SR20 80C	SR20 100C	SR20 150C	SR20 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	20 10										A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0										A
Maximum Instantaneous Forward Voltage $I_F=10A @ 25^\circ C$	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	600					400			300		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		SR20 20C	SR20 30C	SR20 40C	SR20 45C	SR20 50C	SR20 60C	SR20 80C	SR20 100C	SR20 150C	SR20 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

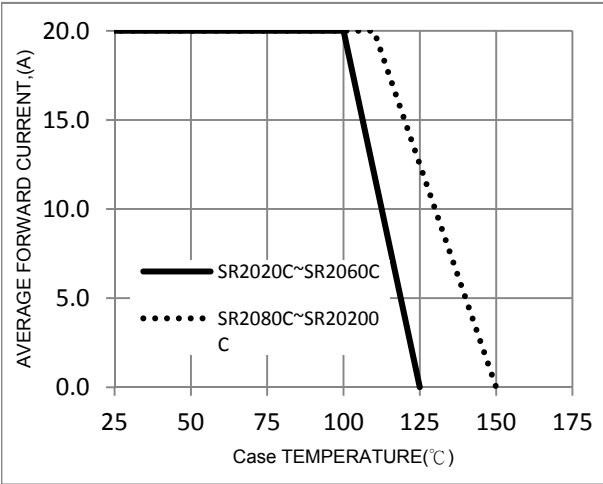


FIG. 2-Typical Forward Characteristics

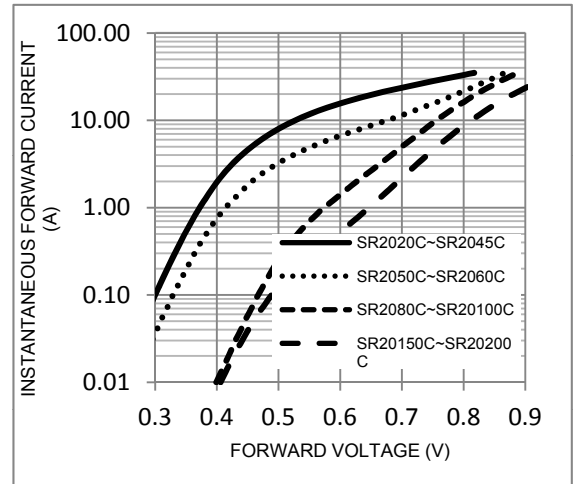


FIG. 3-Maximum Non-Repetitive Forward Surge Current

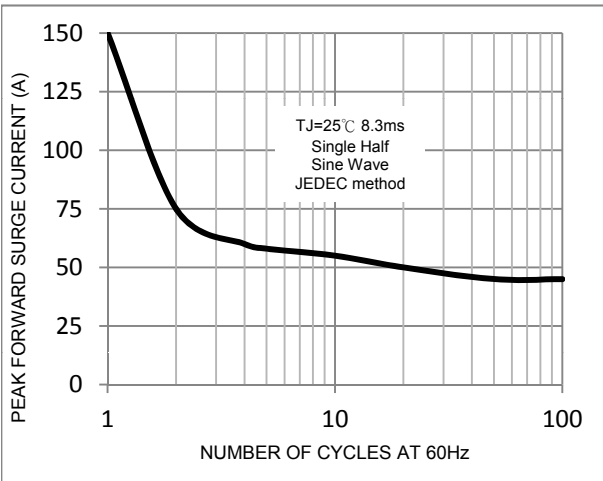


FIG. 4-Typical Reverse Characteristics

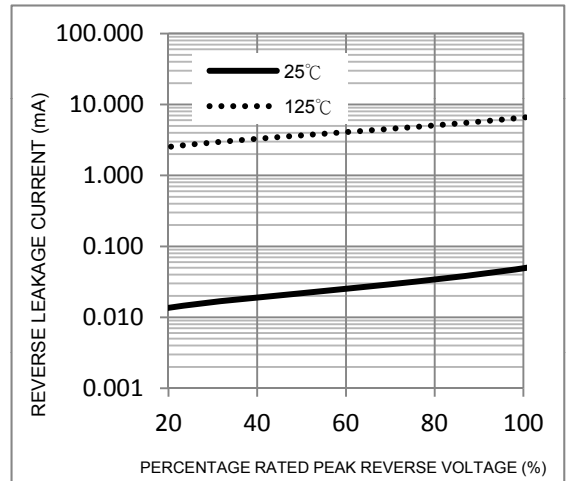
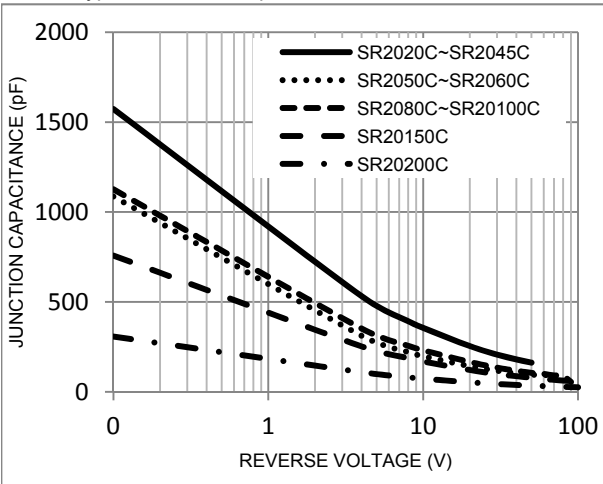
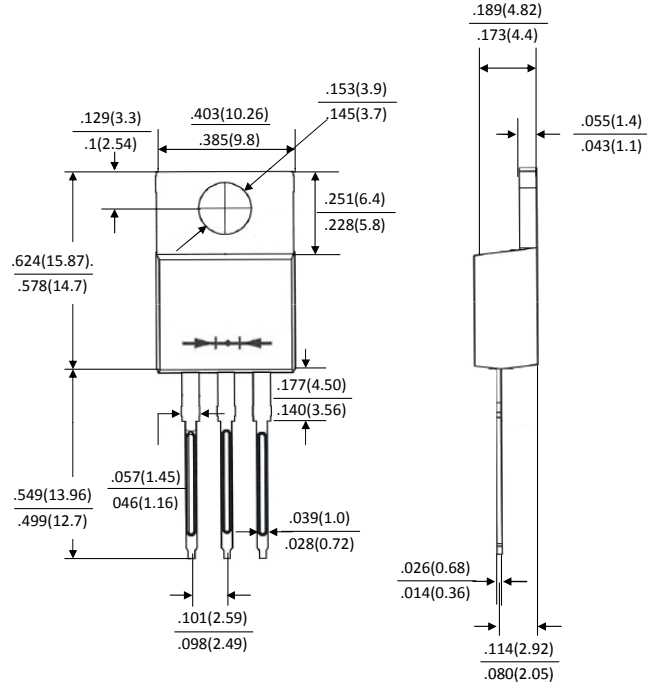


FIG. 5-Typical Junction Capacitance





Package Outline Dimensions



TO-220AB

Dimensions in inches and (millimeters)

Marking Information

