



SRS16xxC SERIES



Schottky Barrier Rectifiers



TO-220AB

Primary Characteristics

I_F	16	A
V_{RRM}	20~200	V
I_{FSM}	120	A
$I_F=8A @ V_F$	0.6, 0.75, 0.85, 0.92	V
$T_J \text{ max}$	125, 150	°C

Features

- Low Power Loss, High Efficiency
- High Current Capability
- Guard Ring for Over Voltage Protection

Mechanical Data

- Case : TO-220AB
- Case Material : Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals : Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity : As Marked

Ordering Information

Part No.	Remark	Package	Packing
SRS16xxC	RoHS Compliant	TO-220AB	50 / Tube
SRS16xxC-H	Halogen Free		

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

Parameter	Symbol	SRS1 620C	SRS1 630C	SRS1 640C	SRS1 645C	SRS1 650C	SRS1 660C	SRS1 680C	SRS1 6100C	SRS1 6150C	SRS1 6200C	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	16 8										A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	120										A	
Maximum Instantaneous Forward Voltage $I_F=8A @ 25^\circ C$	V_F	0.6			0.75		0.85		0.92			V	
Maximum DC Reverse Current @ $T_J=25^\circ C$ at Rated DC Blocking Voltage @ $T_J=100^\circ C$	I_R	0.5 30					0.2 10					mA	
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		SRS1 620C	SRS1 630C	SRS1 640C	SRS1 645C	SRS1 650C	SRS1 660C	SRS1 680C	SRS1 6100C	SRS1 6150C	SRS1 6200C		

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

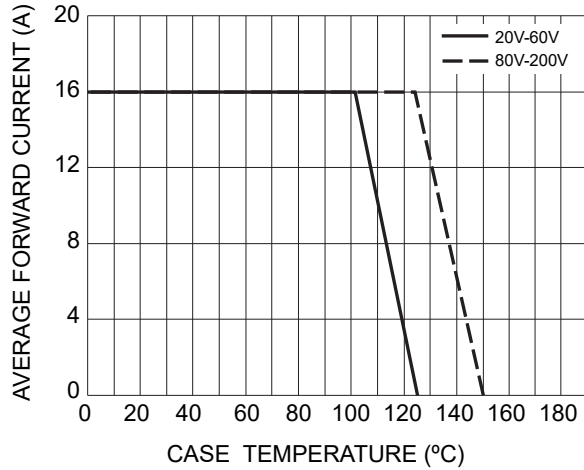


FIG. 2-Typical Forward Characteristics

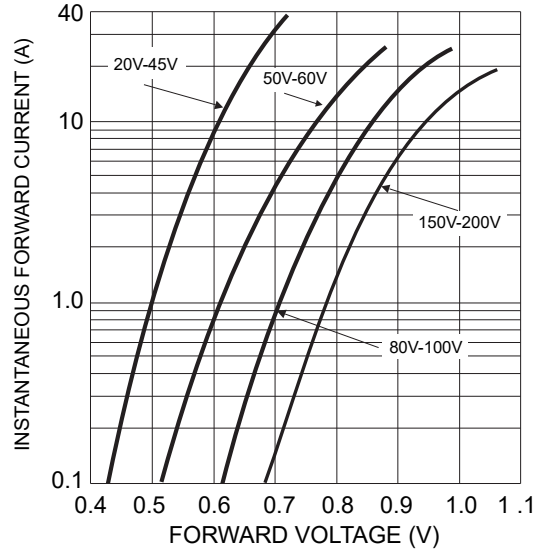


FIG. 3-Maximum Non-Repetitive Forward Surge Current

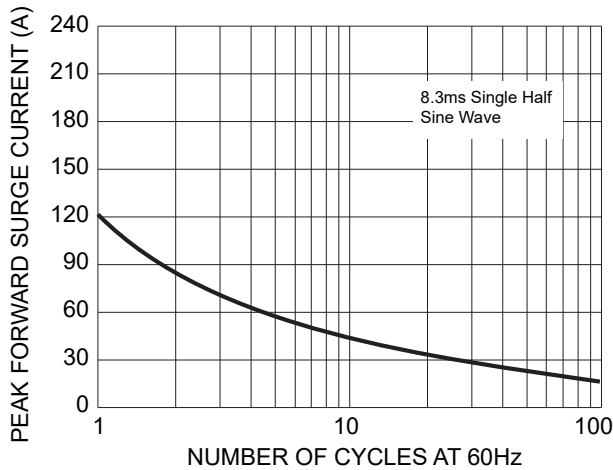
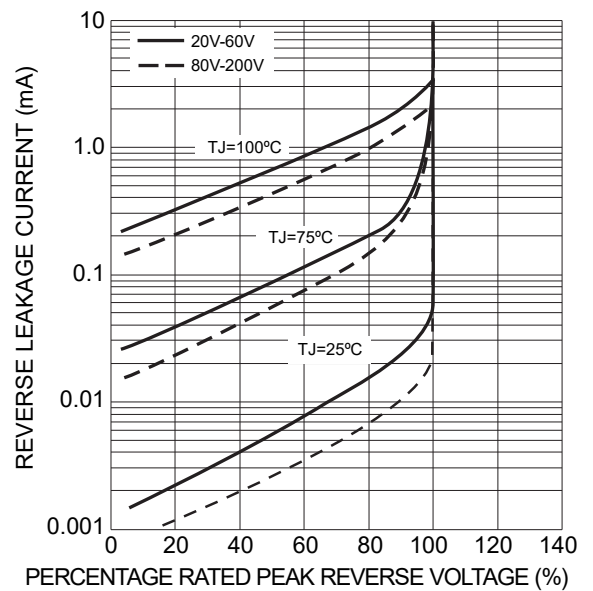
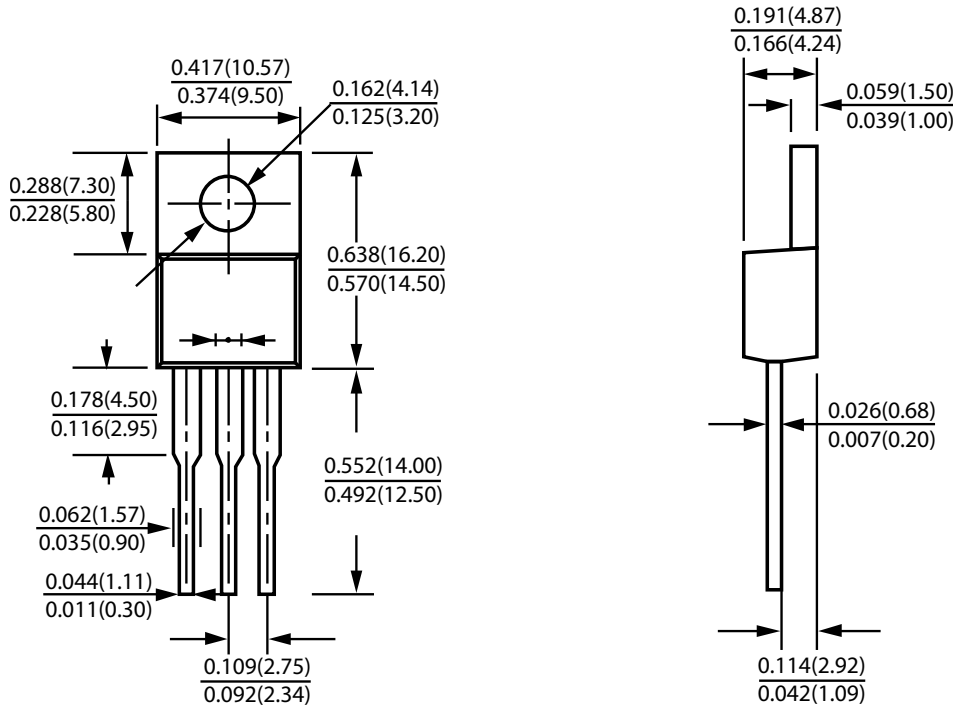


FIG. 4-Typical Reverse Characteristics





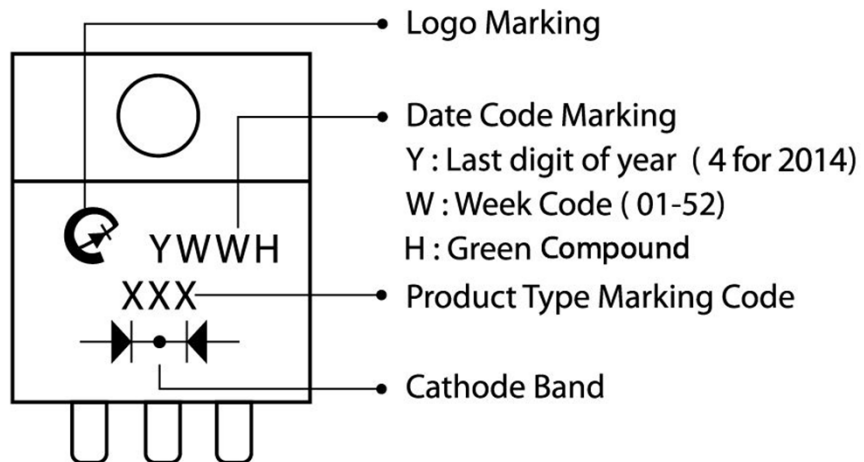
Package Outline Dimensions



TO-220AB

Dimensions in inches and (millimeters)

Marking Information





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