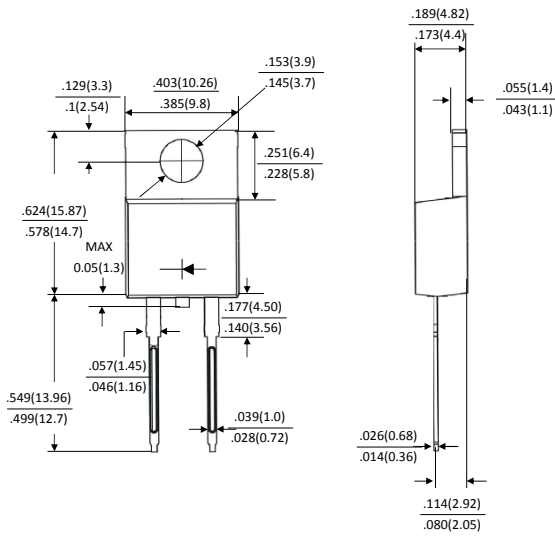




SR1520S thru SR15200S



Schottky Barrier Rectifiers



TO-220AC

Dimensions in inches and (millimeters)



Ordering Information	
Part Number	Remark
SR15xxS	General
SR15xxS-H	Halogen Free
SR15xxS-Q	Automotive

PRIMARY CHARACTERISTICS	
I_F	15A
V_{RRM}	20~200V
I_{FSM}	200A
V_F	0.55V, 0.70V, 0.85V, 0.92V
T_J max	125°C , 150°C

Features

- Guard Ring for over voltage Protection
- High forward surge capability
- High frequency operation
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

Mechanical Date

- Case:TO-220AC
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals:Matte Tin Finish annealed over copper Leadframe. Solderable per MIL-STD-202
- Weight: 1.909 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	SR15 20S	SR15 30S	SR15 40S	SR15 45S	SR15 50S	SR15 60S	SR15 80S	SR15 100S	SR15 150S	SR15 200S	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	I_F	15.0										A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200.0										A
Maximum Instantaneous Forward Voltage $I_F=15A @ 25^\circ C$	V_F	0.55			0.70			0.85		0.92		V
Maximum DC Reverse Current @ $T_c=25^\circ C$ at Rated DC Blocking Voltage @ $T_c=100^\circ C$	I_R	0.5 30						0.2 20				mA
Typical Junction Capacitance(NOTE1)	C_j	700			720			950		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

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



FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

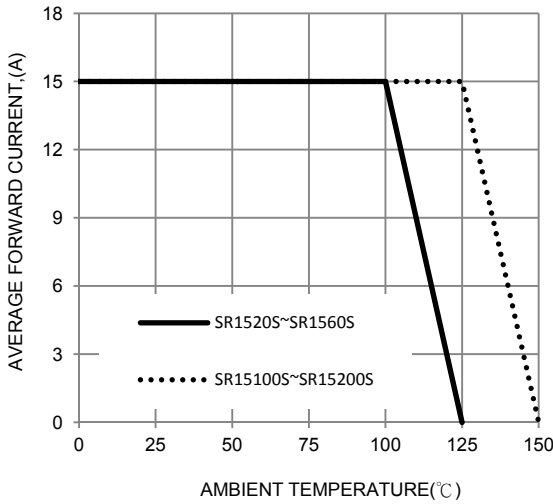


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

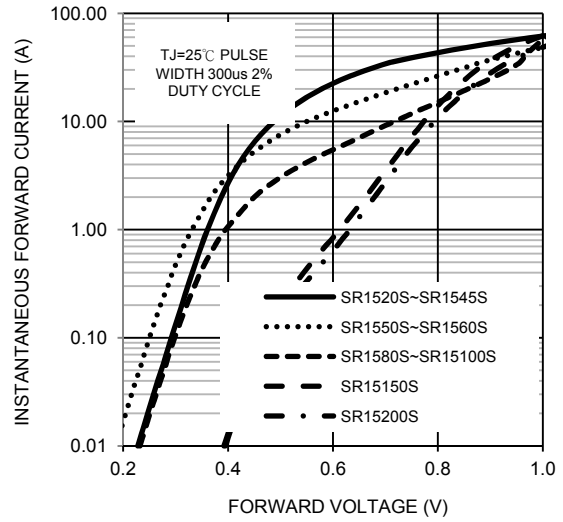


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

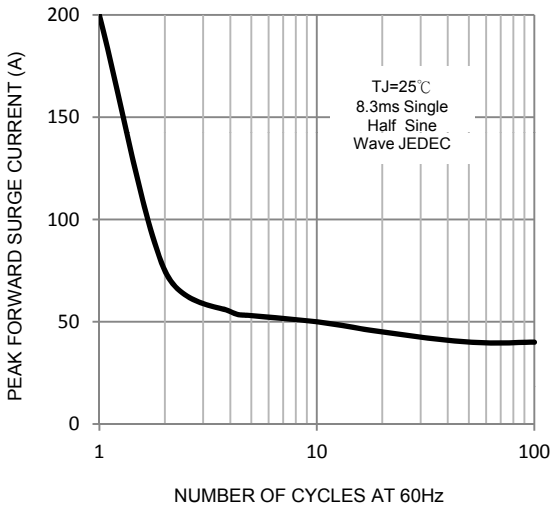


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

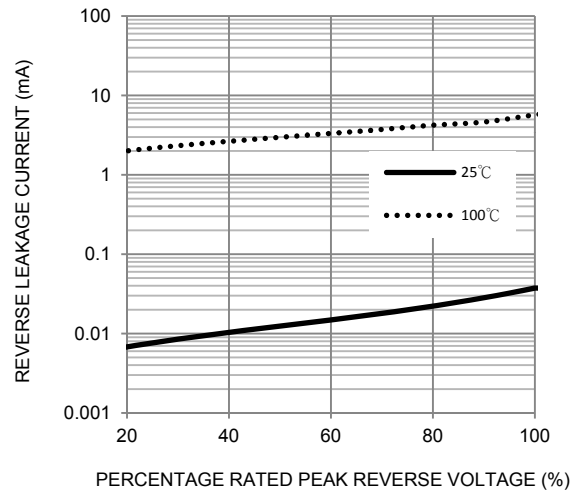


FIG. 5-TYPICAL JUNCTION CAPACITANCE

