Elektronische Bauelemente

SR1620 THRU SR16100

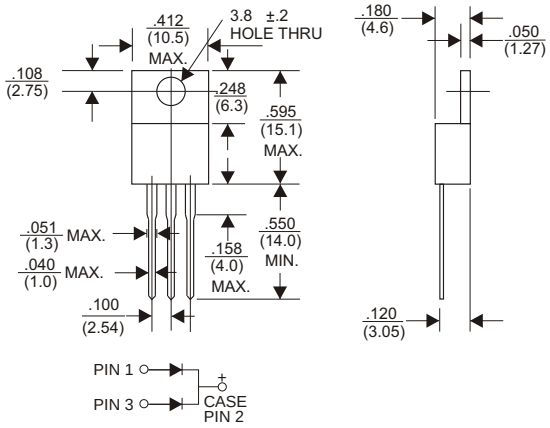
VOLTAGE 20V ~ 100V

16.0AMP Schottky Barrier Rectifiers

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

TO-220



Dimensions in inches and (millimeters)

FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Epitaxial construction

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
* Polarity: As Marked
* Mounting position: Any
* Weight: 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SR1620	SR1630	SR1640	SR1660	SR1680	SR16100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	60	80	100	V
Maximum RMS Voltage	14	21	28	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	16						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	130			100			A
Maximum Instantaneous Forward Voltage at 8.0A	0.57			0.68	0.82		V
Maximum DC Reverse Current Ta=25°C	10						mA
at Rated DC Blocking Voltage Ta=100°C	100						mA
Typical Junction Capacitance (Note1)	700			460	280		pF
Typical Thermal Resistance RθJC (Note 2)	3.0						°C/W
Operating Temperature Range T_J	-50 ~ +125						°C
Storage Temperature Range T_{STG}	-65 ~ +150						°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Case.

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RATING AND CHARACTERISTIC CURVES (SR1620 THRU SR16100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

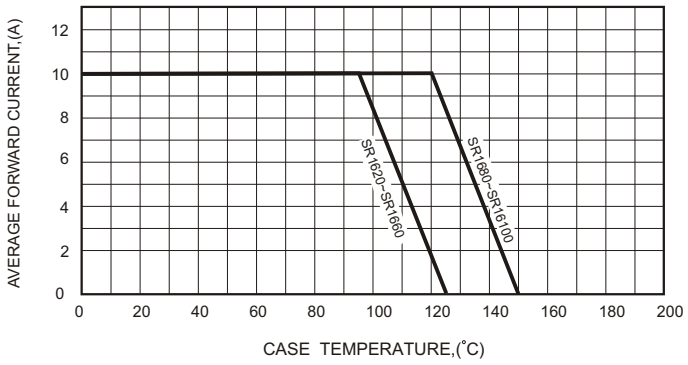

FIG.2-TYPICAL FORWARD CHARACTERISTICS

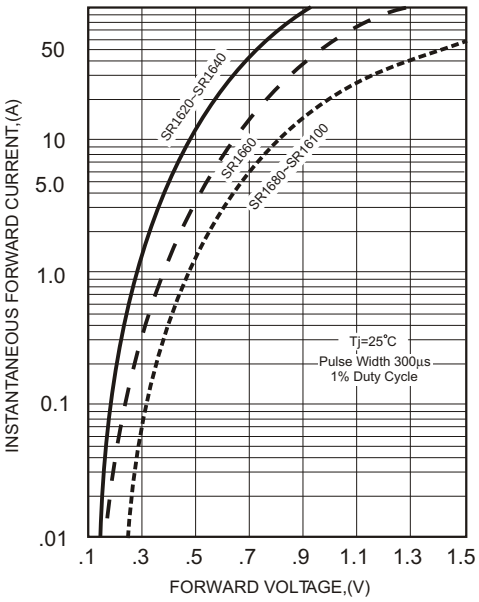

FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

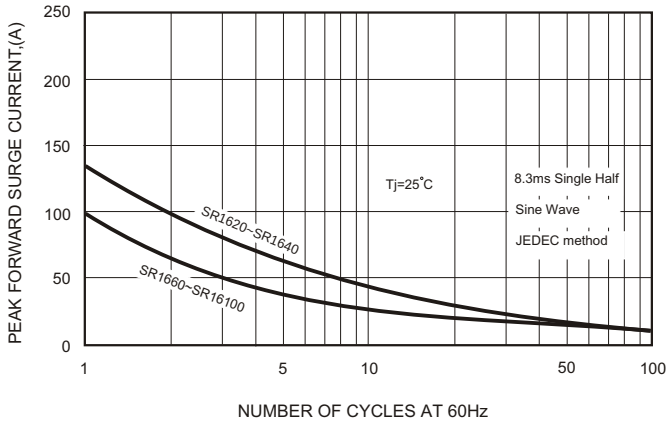

FIG.4-TYPICAL JUNCTION CAPACITANCE

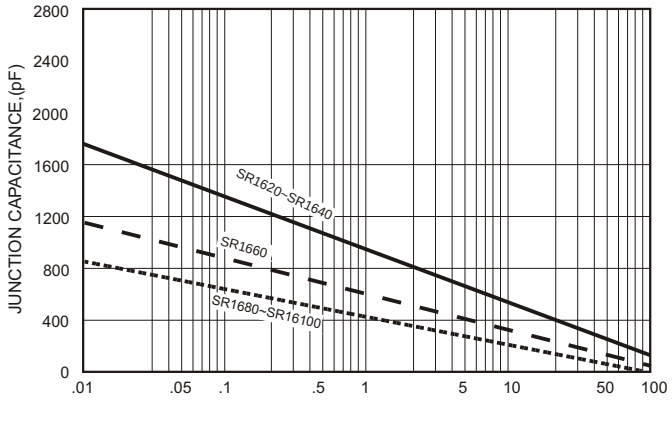

FIG.5 - TYPICAL REVERSE CHARACTERISTICS