Elektronische Bauelemente

SP3020R THRU SP30100R

VOLTAGE 20V ~ 100V

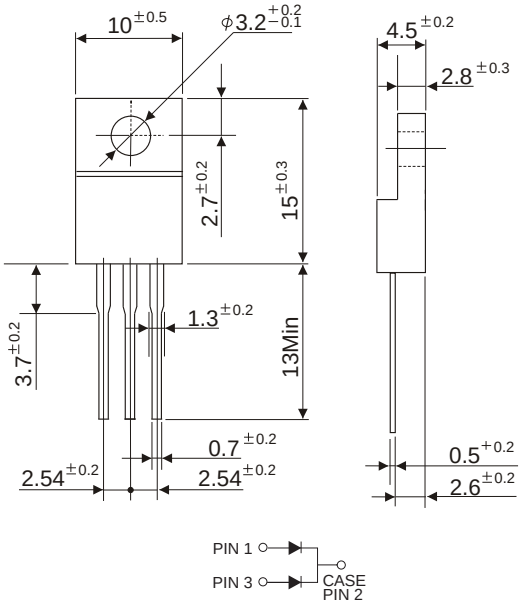
30.0AMP Schottky Barrier Rectifiers

RoHS Compliant Product

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



ITO-220



Dimensions in 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℃ ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SP3020R	SP3030R	SP3040R	SP3060R	SP3080R	SP30100R	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	60	80	100	V
Working Peak Reverse Voltage	20	30	40	60	80	100	V
Maximum DC Blocking Voltage	20	30	40	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	30						A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	280			230			A
Maximum Instantaneous Forward Voltage at 15.0A Ta=25℃	0.52			0.65	0.80		V
Maximum DC Reverse Current Ta=25℃	0.15						mA
at Rated DC Blocking Voltage Ta=100℃	100						mA
Typical Junction Capacitance (Note1)	700			460	280		pF
Typical Thermal Resistance RθJC (Note 2)	3.5						℃/W
Operating Temperature Range T_J	-50 ~ +150						℃
Storage Temperature Range T_{STG}	-65 ~ +175						℃

NOTES:

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

2. Thermal Resistance Junction to Case.

Elektronische Bauelemente

SP3020R THRU SP30100R

VOLTAGE 20V ~ 100V

30.0AMP Schottky Barrier Rectifiers

RATING AND CHARACTERISTIC CURVES (SP3020R THRU SP30100R)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

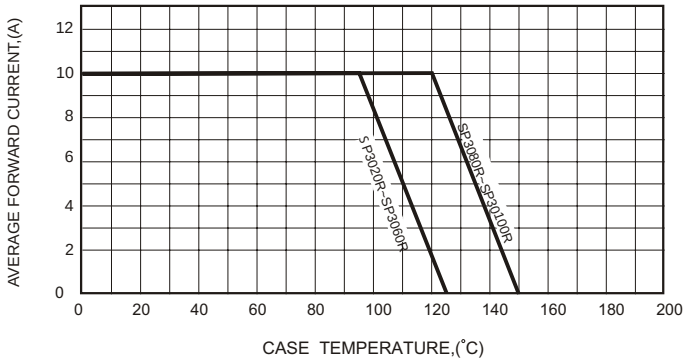


FIG.2-TYPICAL FORWARD CHARACTERISTICS

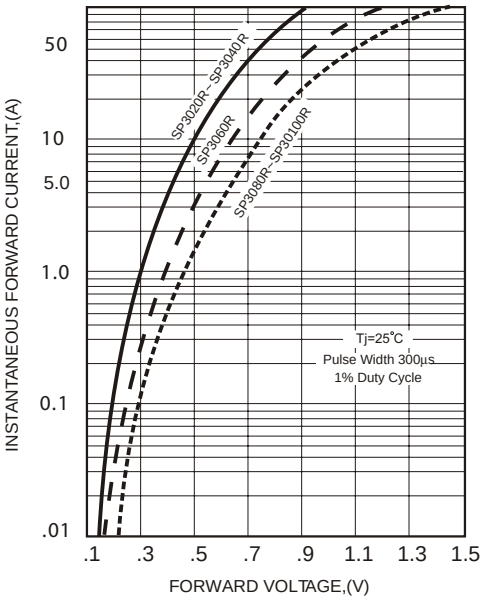


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

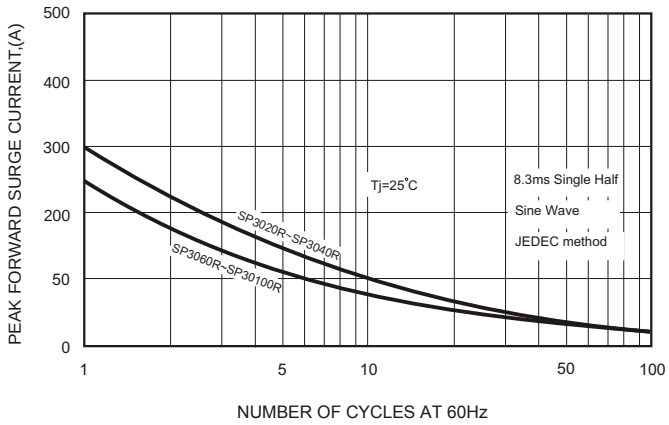


FIG.4-TYPICAL JUNCTION CAPACITANCE

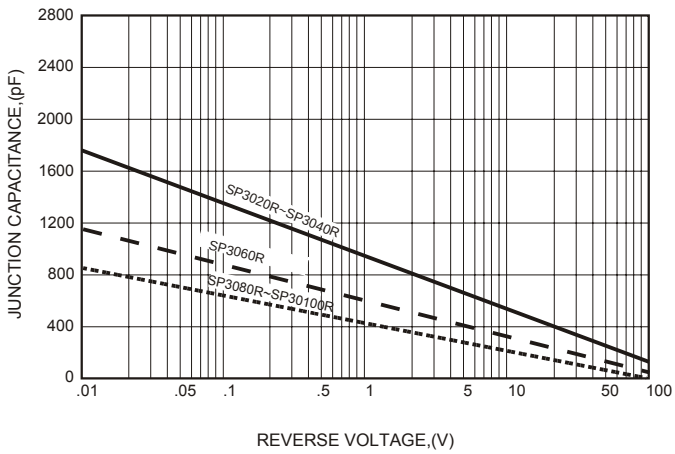


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

