SM220A THRU SM2100A

2.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

GW

FEATURES

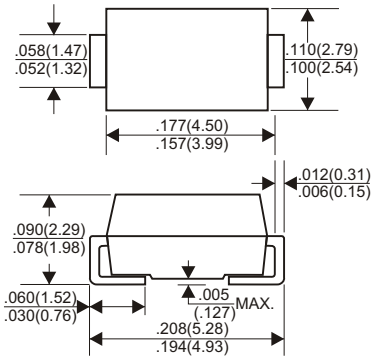
* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* Low forward voltage drop

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Metallurgically bonded construction
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.063 grams

VOLTAGE RANGE
20 to 100 Volts
CURRENT
2.0 Ampere

DO-214AC(SMA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SM220A	SM230A	SM240A	SM250A	SM260A	SM280A	SM290A	SM2100A	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current See Fig. 1	2.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	50								A
Maximum Instantaneous Forward Voltage at 2.0A	0.55			0.70		0.85			V
Maximum DC Reverse Current Ta=25˚C	1.0								mA
at Rated DC Blocking Voltage Ta=100˚C	20								mA
Typical Junction Capacitance (Note1)	170								pF
Typical Thermal Resistance R JA (Note 2)	75								˚C/W
Operating Temperature Range TJ	-65 —+125			-65 —+150					˚C
Storage Temperature Range TSTG	-65 — +150								˚C

NOTES:

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

2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (SM220A THRU SM2100A)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

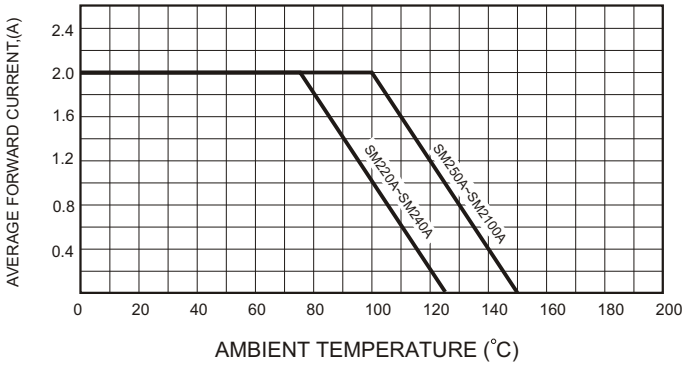


FIG.2-TYPICAL FORWARD CHARACTERISTICS

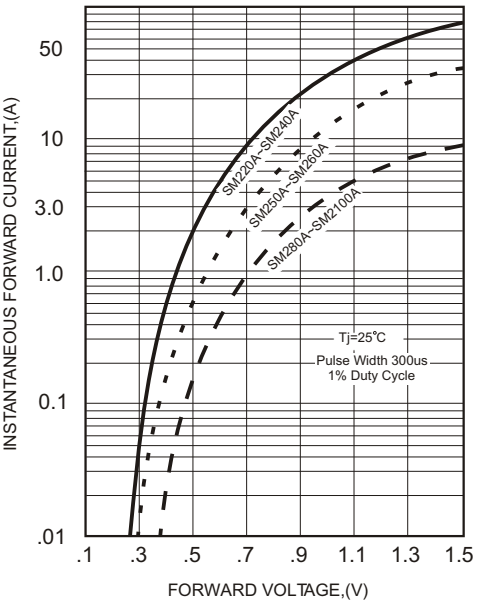


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

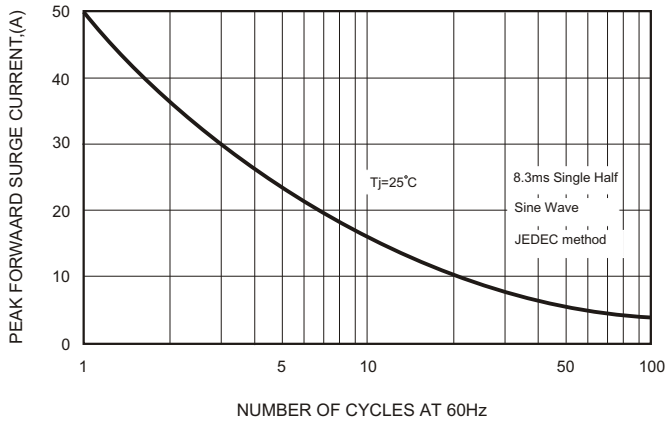


FIG.4-TYPICAL JUNCTION CAPACITANCE

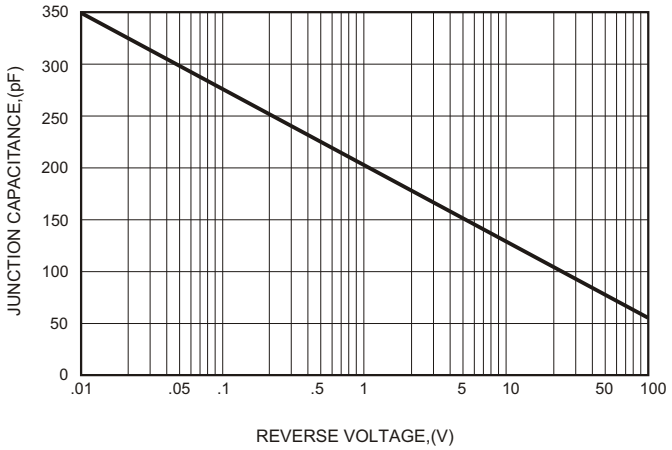
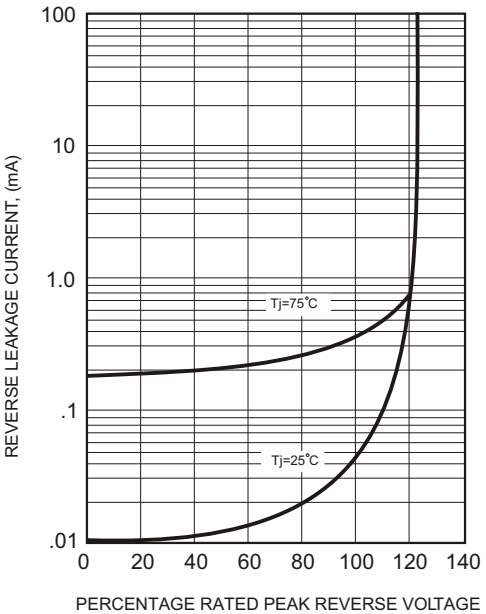



FIG.5 - TYPICAL REVERSE CHARACTERISTICS