

RoHS Compliant Product

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



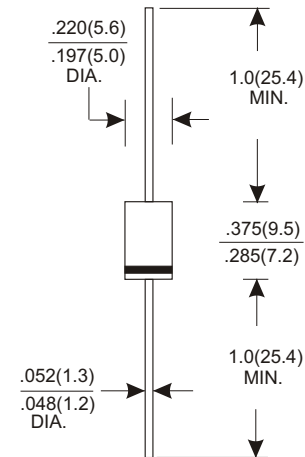
FEATURES

- 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: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 1.10 grams

DO-27



Dimensions in inches and (millimeters)

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	1N5820	1N5821	1N5822	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	V
Working Peak Reverse Voltage	20	30	40	V
Maximum DC Blocking Voltage	20	30	40	V
Maximum Average Forward Rectified Current				
.375"(9.5mm) Lead Length at Ta=90°C	3.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80			A
Maximum Instantaneous Forward Voltage at 3.0A	0.45	0.55		V
Maximum DC Reverse Current Ta=25°C	2.0			mA
at Rated DC Blocking Voltage Ta=100°C	20			mA
Typical Junction Capacitance (Note1)	250			pF
Typical Thermal Resistance RθJA (Note 2)	28			°C/W
Operating Temperature Range Tj	-50 ~ +150			°C
Storage Temperature Range Tstg	-65 ~ +175			°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 (1N5820 THRU 1N5822)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

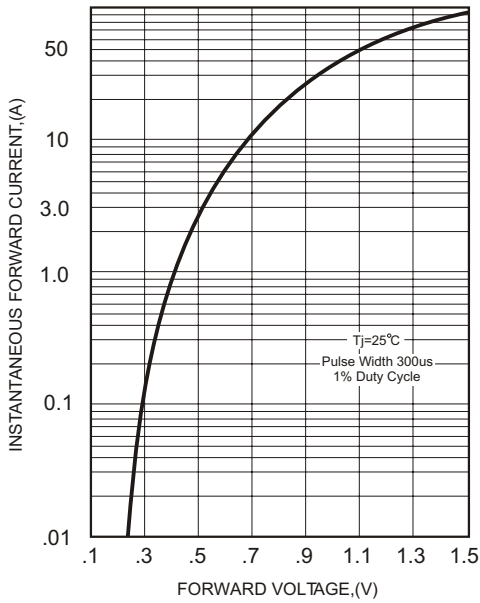


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

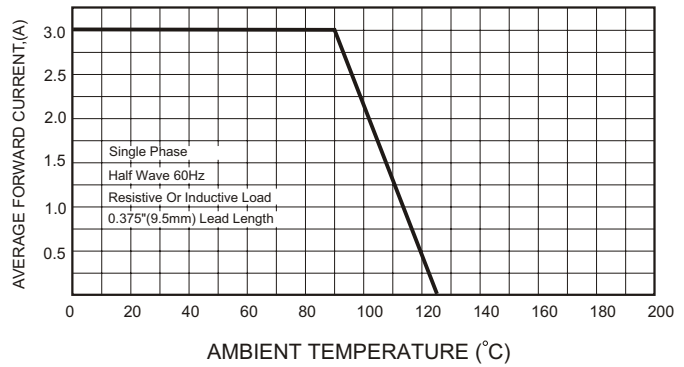


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

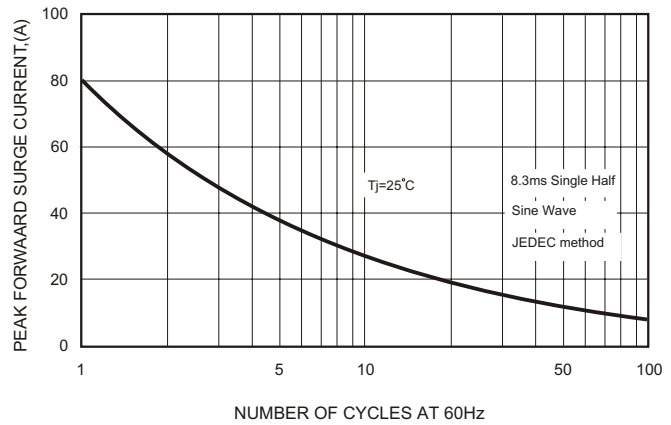


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

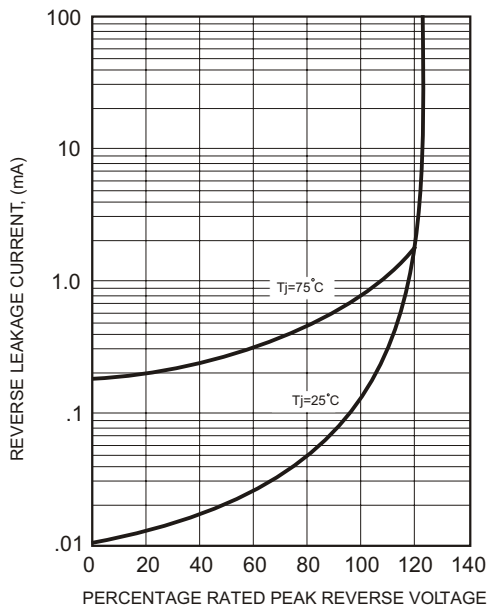


FIG.5-TYPICAL JUNCTION CAPACITANCE

