



FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

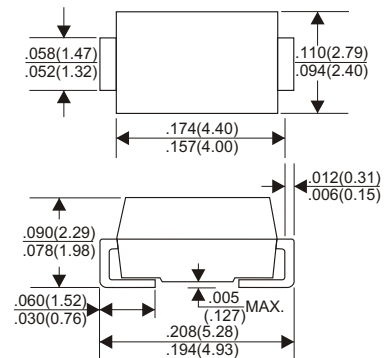
VOLTAGE RANGE

1000 Volts

CURRENT

1.0 Ampere

DO-214AC(SMA)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	1N4007	UNITS
Maximum Recurrent Peak Reverse Voltage	1000	
Maximum RMS Voltage	700	V
Maximum DC Blocking Voltage	1000	
Maximum Average Forward Rectified Current		
.375"(9.5mm) Lead Length at Ta=75°C	1.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30	A
Maximum Instantaneous Forward Voltage at 1.0A	1.0	V
Maximum DC Reverse Current Ta=25°C	2.0	μA
at Rated DC Blocking Voltage Ta=100°C	200	μA
Typical Junction Capacitance (Note 1)	18	pF
Typical Thermal Resistance R JA (Note 2)	65	°C/W
Operating and Storage Temperature Range Tj, Tstg	-65 — +150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (1N4007)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

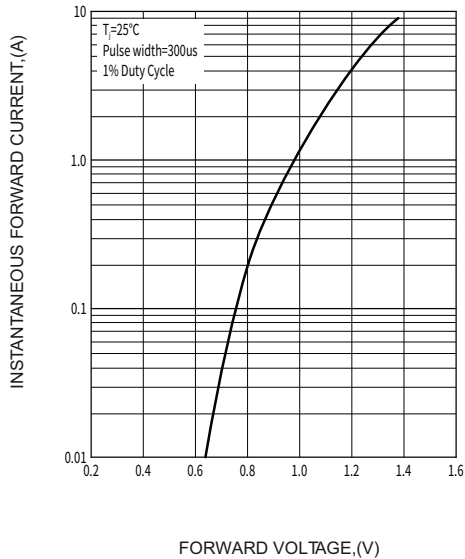


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

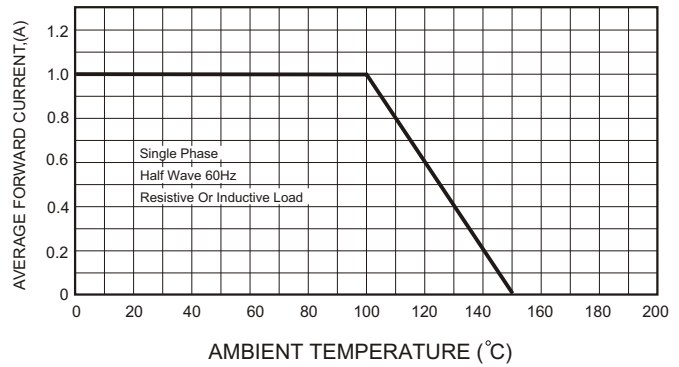


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

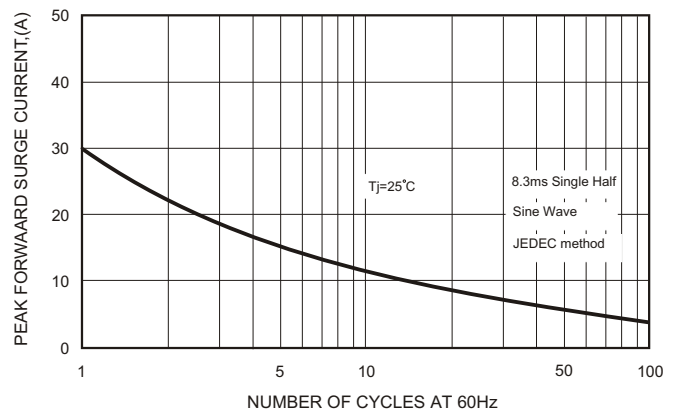


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

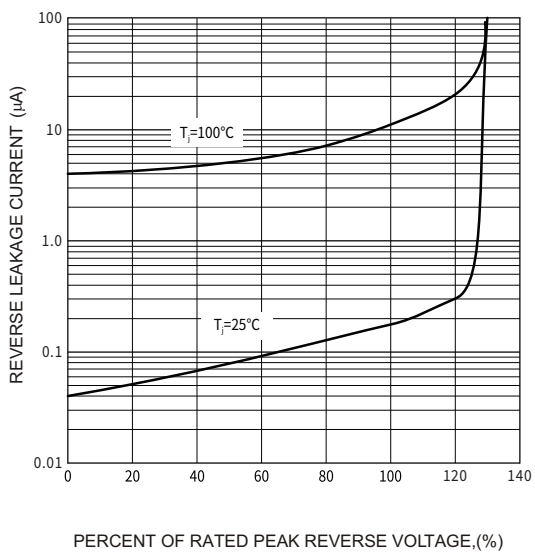


FIG.5-TYPICAL JUNCTION CAPACITANCE

