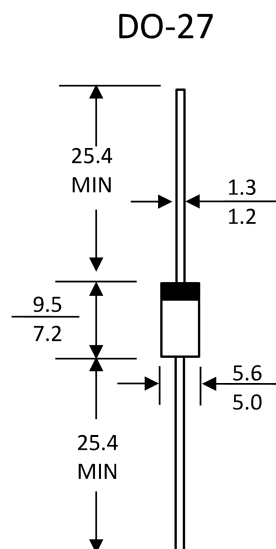


**Features**

- The plastic package Carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds.0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

- **Case:** DO-27 ,molded plastic body
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
- **Polarity:**Color band denotes cathode end
- **Mounting Position:** Any

**Maximum Ratings & Thermal Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at T _A =75 °C	I _{F(AV)}	3.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150.0							A
Maximum instantaneous forward voltage at 3.0A	V _F	1.0							V
Maximum DC reverse Current T _A =25°C At rated DC blocking voltage T _A =100°C	I _R	5.0 100							uA
Typical junction capacitance (Note 1)	C _J	30.0							pF
Typical thermal resistance (Note 2)	R _{θJA}	20.0							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +150							°C

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

2. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B. mounted

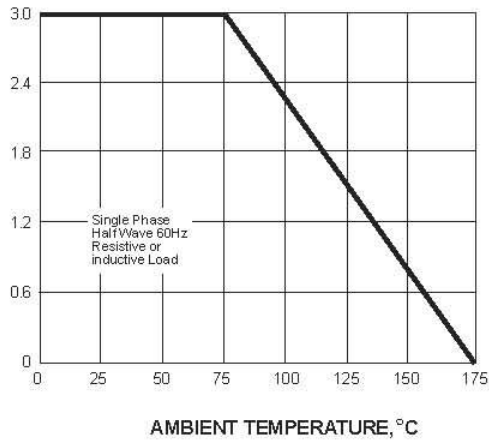


RATINGS AND CHARACTERISTIC CURVES

(T = 25°C unless otherwise noted)

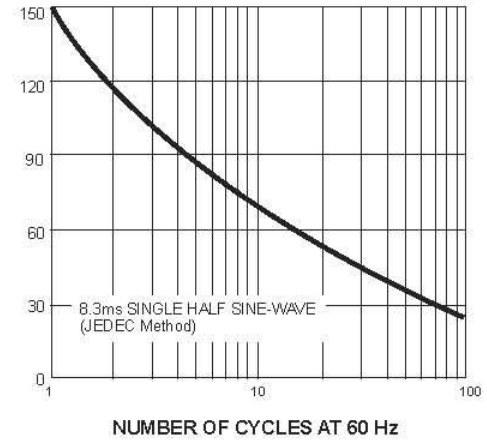
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



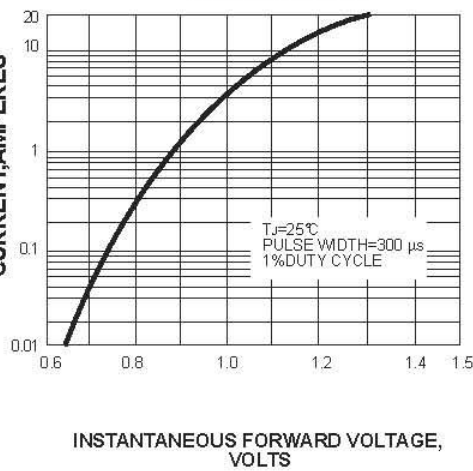
PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



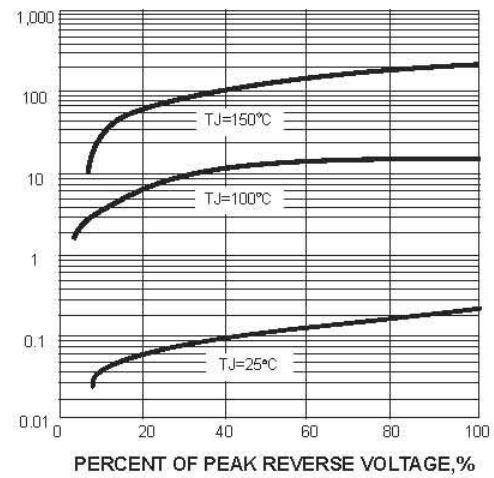
INSTANTANEOUS FORWARD
CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



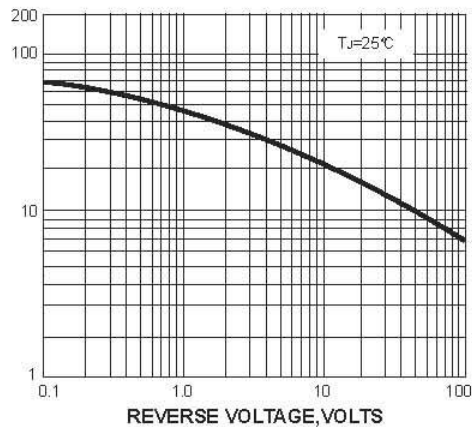
INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

