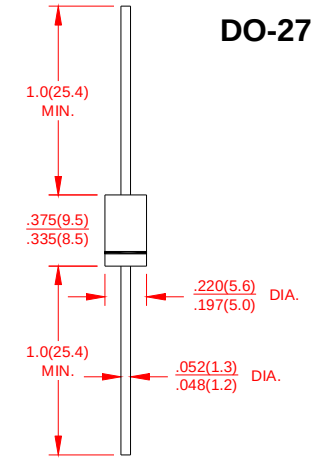
VOLTAGERANGE:200 to 1300 Volts
CURRENT: 3.0 Ampere

FEATURES

- Low coat construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260℃/10 secods/.375”(9.5mm)lead length at 5 lbs(2.3kg) tension

DO-27



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.042 ounce, 1.19 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25^{O}C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	BY251	BY252	BY253	BY254	BY255	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1300	Volts
Maximum RMS Voltage	V_{RMS}	140	280	420	560	910	Volts
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1300	Volts
Maximum Average Forward Rectified Current 0.375”(9.5mm) lead length at T_A= 75℃	$I_{(AV)}$	3.0					Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	125					Amps
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	1.1					Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element T_A = 25℃	I_R	5.0					μA
Maximum DC Reverse Current at Rated DC Blocking Voltage per element T_A = 100℃	I_R	50					μA
Maximum Full Load Reverse Current, full cycle average 0.375”(9.5mm)lead length at T_L=75℃	$I_{R(AV)}$	500					μA
Typical Junction Capacitance (Note 1)	C_J	40					pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	30					℃/W
Operating Junction Temperature Range	T_J	-55 to +150					℃
Storage Temperature Range	T_{STG}	-55 to +150					℃

Notes:

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to ambient at .375”(9.5mm) lead length, P.C.board mounted.

RATING AND CHRACTERISTIC CURVES BY251 Thur BY255

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

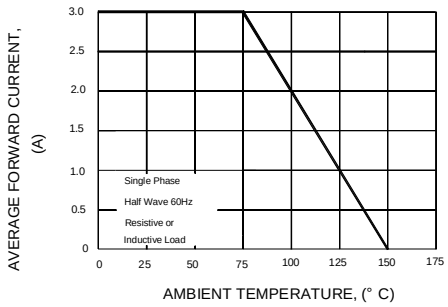


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

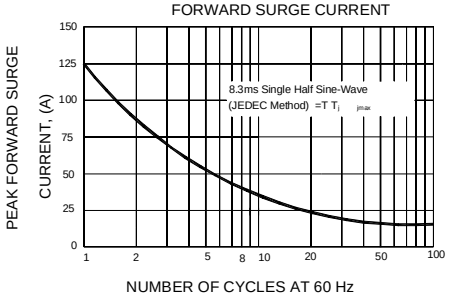


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

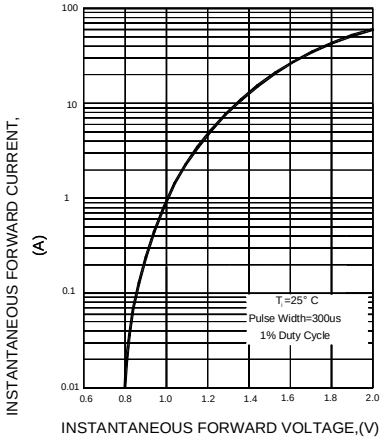


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

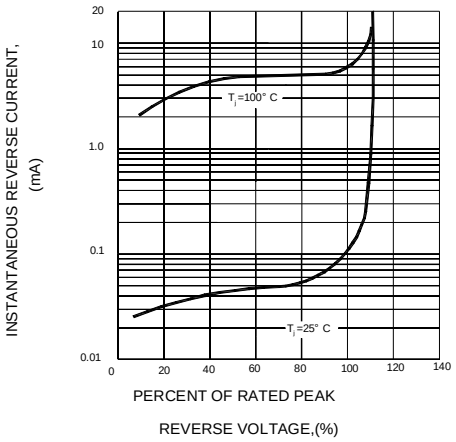


FIG.5-TYPICAL JUNCTION CAPACITANCE