

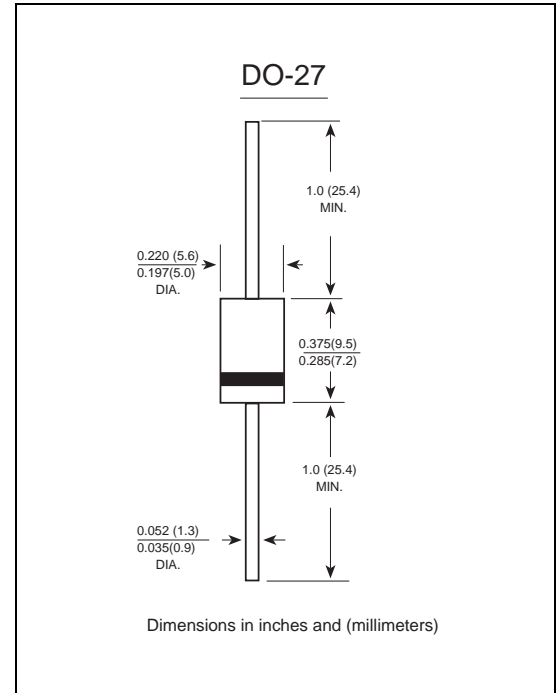
BY251~BY255 3.0Amp Silicon Rectifiers

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: JEDEC DO-27 molded plastic body
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Mounting Position: Any
 Weight : 0.04 ounce, 1.10 grams



Maximum Ratings And Electrical 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%.

	SYMBOLS	BY251	BY252	BY253	BY254	BY255	UNITS
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 $T_A=75^\circ\text{C}$	$I_{(AV)}$	3.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150					Amps
Maximum instantaneous forward voltage at 3.0A	V_F	1.1					Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	10.0 500					μA
Typical junction capacitance (NOTE 1)	C_J	30.0					pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	20.0					$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175					$^\circ\text{C}$

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