

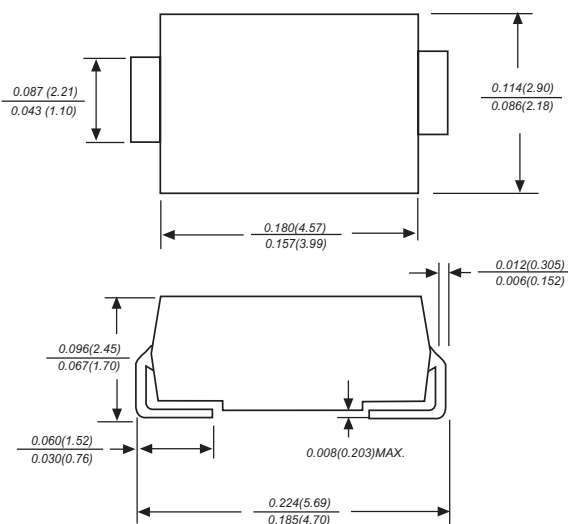
## I. General Purpose Rectifier

# BYG10D THRU BYG10Y

## SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 50 to 1600 Volts Forward Current - 1.5 Ampere

### DO-214AC



Dimensions in inches and (millimeters)

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals

### MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic body  
**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.003 ounce, 0.093 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	BYG 10D	BYG 10G	BYG 10J	BYG 10K	BYG 10M	BYG 10Y	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	1600	VOLTS
Maximum RMS voltage	$V_{RMS}$	140	280	480	640	700	1120	VOLTS
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	1600	VOLTS
Maximum average forward rectified current at $T_L=110^\circ\text{C}$	$I_{(AV)}$	1.5						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30.0						Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.1						Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	5.0 50.0						$\mu\text{A}$
Typical junction capacitance (NOTE 1)	$C_J$	15.0						pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	125.0						$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150						$^\circ\text{C}$

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

2. Thermal resistance junction to ambient, P.C.B. mounted with (7.0x7.0mm) copper pad areas

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**RATINGS AND CHARACTERISTIC CURVES**

