

BY296 THRU BY299

2.0AMPS . FAST RECOVERY RECTIFIERS

FEATURE

- . Fast switching
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed 260°C /10sec/ 0.375" lead length at 5 lbs tension

MECHANICAL DATA

. Terminal: Plated axial leads solderable per

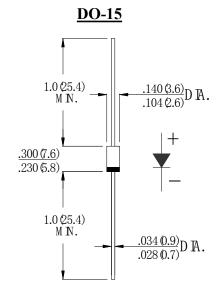
MIL-STD 202E, method 208C

. Case: Molded with UL-94 Class V-0 recognized

Flame Retardant Epoxy

. Polarity: color band denotes cathode

. Mounting position: any



Dimensions in inches and (millimeters)

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, derate current by 20%

Type Number	SYMBOL	BY296	BY297	BY298	BY299	units
Maximum Recurrent Peak Reverse Voltage	$V_{ m RRM}$	100	200	400	800	V
Maximum RMS Voltage	$V_{ m RMS}$	70	140	280	560	V
Maximum DC blocking Voltage	$V_{ m DC}$	100	200	400	800	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at T _A =55°C	I _{F(AV)}	2.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		60.0				A
Maximum Instantaneous forward Voltage at 2.0A DC	$V_{ m F}$	1.3				V
Maximum DC Reverse Current $@T_A=25^{\circ}C$ at rated DC blocking voltage $@T_A=100^{\circ}C$	I_{R}	5.0 100.0				μΑ
Maximum Reverse Recovery Time (Note 1)	trr	250				ns
Typical Junction Capacitance (Note 2)	C _J	30				pF
Typical Thermal Resistance (Note 3)	R _(JA)	75				°C/W
Storage Temperature	T _{STG}	-55 to +150				°C
Operation Junction Temperature	$T_{ m J}$	-55 to +150				°C

Note:

- 1. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 3. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.