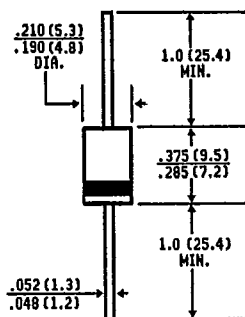


BY296P THRU BY299P**SOFT RECOVERY PLASTIC RECTIFIER****VOLTAGE - 100 to 800 Volts CURRENT - 2.0 Amperes****FEATURES****DO-201AD**

Dimensions in inches
and
(millimeters)

- ◆ High surge current capability
- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Void-free plastic package
- ◆ 2.0 Ampere operation at $T_A = 55^\circ\text{C}$ with no thermal runaway
- ◆ Fast switching for high efficiency
- ◆ High temperature soldering guaranteed: $265^\circ\text{C}/10$ seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension

MECHANICAL DATA**Case:** Molded plastic**Terminals:** Axial leads, solderable per MIL-ST-202, Method 208**Polarity:** Color band denotes cathode**Mounting Position:** Any**Weight:** .04 ounce, 1.1 gram**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

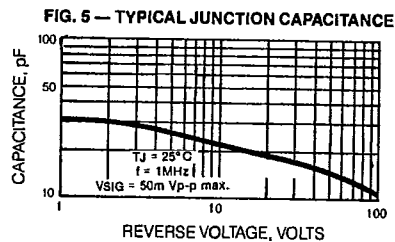
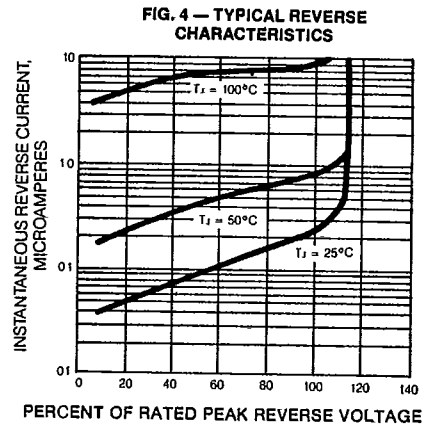
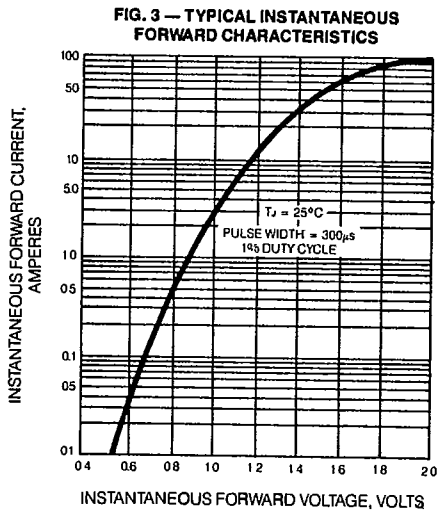
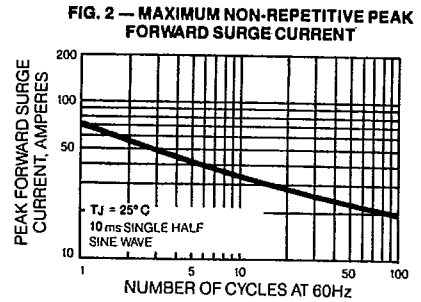
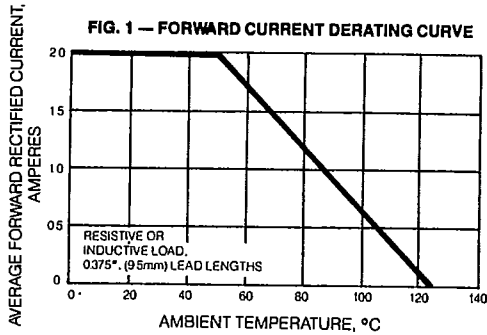
	SYMBOLS	BY296P	BY297P	BY298P	BY299P	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	400	800	Volts
Maximum RMS Voltage	VRMS	70	140	280	560	Volts
Maximum DC Blocking Voltage	VDC	100	200	400	800	Volts
Maximum Average Forward Rectified Current .375", (9.5mm) lead lengths at $T_A = 55^\circ\text{C}$	I(AV)	2.0				Amps
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load	IFSM	70.0				Amps
Maximum Repetitive Peak Forward Surge (Note 1)	IFRM	10.0				Amps
Maximum Instantaneous Forward Voltage at 3.0A	V _F	1.3				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
Maximum Reverse Recovery Time (Note 3) $T_J = 25^\circ\text{C}$	T _{RR}	500				ns
Maximum Forward Recovery Time at 100mA	T _{FR}	1.0				μs
Typical Junction Capacitance (Note 2) $T_J = 25^\circ\text{C}$	C _J	28.0				pf
Typical Thermal Resistance (Note 4)	R _{ΘJA}	15.0				$^\circ\text{C/W}$
Operating Temperature Range	T _J	-50 to +125				$^\circ\text{C}$
Storage Temperature Range	T _{STG}	-50 to +150				$^\circ\text{C}$

NOTES:

1. Repetitive Peak Forward Surge Current at $f < 15\text{KHz}$
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Reverse Recovery Tset Conditions: $I_F = 10\text{mA}$, $I_R = 10\text{mA}$, $I_{RR} = 1.0\text{mA}$
4. Thermal Resistance from Junction to Ambient at .375" (9.5mm) lead lengths with both leads to heat sink.

T-03-15

RATINGS AND CHARACTERISTIC CURVES BY296P THRU BY299P



**GENERAL
INSTRUMENT**