

BYW32 - BYW36

PRV : 200 - 600Volts
Io : 2.0 Amperes

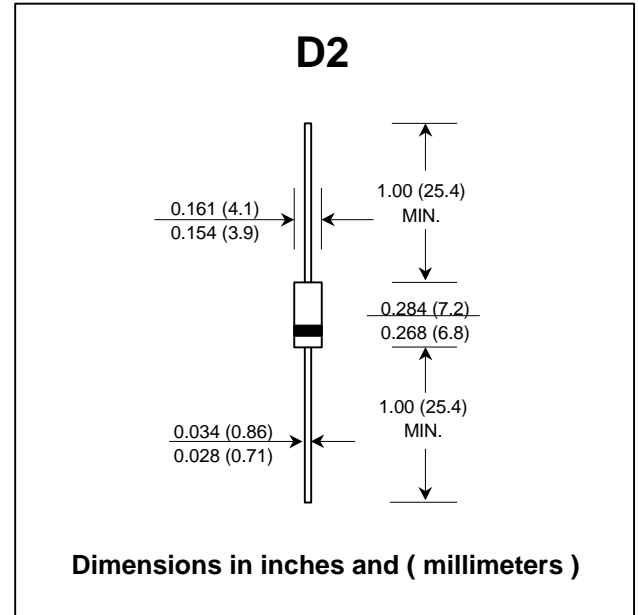
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : D2 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.465 gram

FAST RECOVERY RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

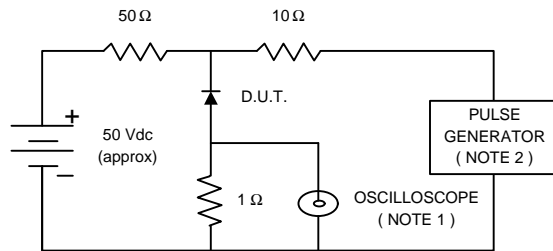
RATING	SYMBOL	BYW32	BYW33	BYW34	BYW35	BYW36	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	300	400	500	600	V
Maximum Maximum RMS voltage	V_{RMS}	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	200	300	400	500	600	V
Maximum Average Forward Current 0.375" (9.5mm) Lead Length at $T_a=55^{\circ}C$	$I_{F(AV)}$	2.0					A
Maximum Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load	I_{FSM}	40					A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.2					V
Maximum DC reverse current at rated DC blocking voltage	I_R	5.0					μA
Typical Reverse Recovery Time (1)	T_{rr}	200					μs
Thermal Resistance - Junction to Ambient (2)	$R_{\theta JA}$	100					C/W
Junction Temperature Range	T_J	- 65 to + 175					$^{\circ}C$
Storage Temperature Range	T_{STG}	- 65 to + 200					$^{\circ}C$

Notes :

- (1) Test Conditions : $I_F = 0.5 A$ to $I_R = 1 A$; measured at $I_{rr} = 0.25 A$
- (2) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATING AND CHARACTERISTIC CURVES (BYW32 - BYW36)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES :

1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

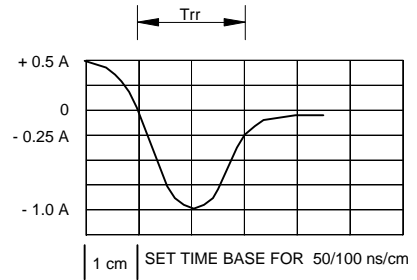


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

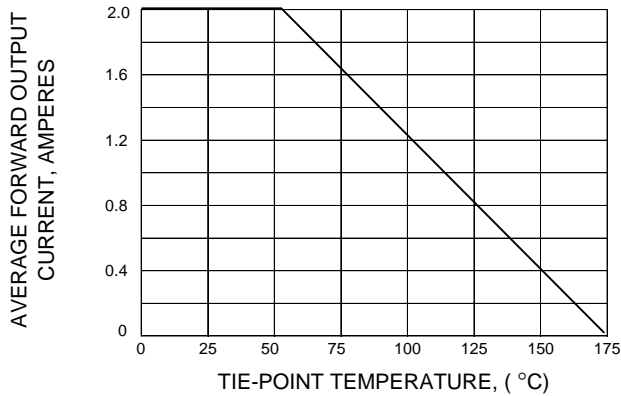


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

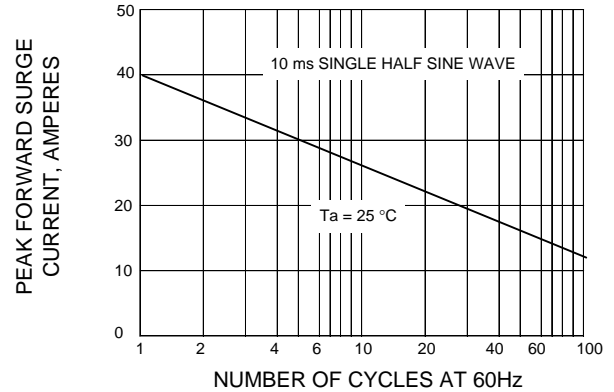


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

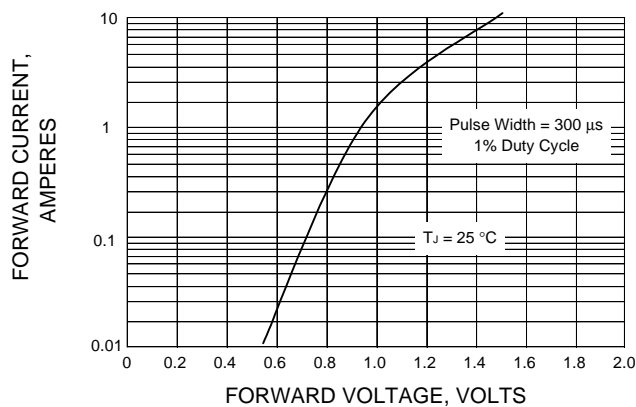


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

