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BYW32 - BYW36

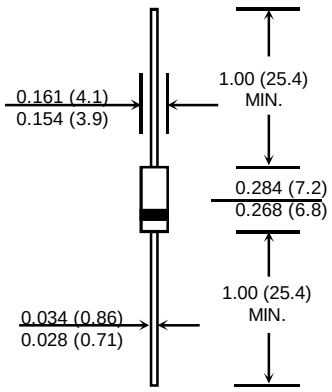
FAST RECOVERY RECTIFIER DIODES

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

D2



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

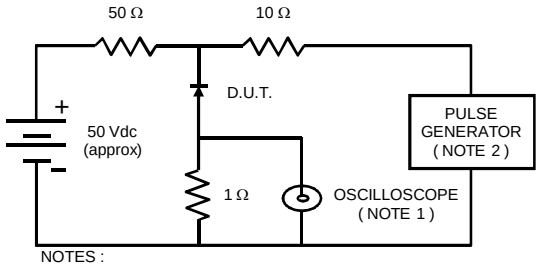
Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

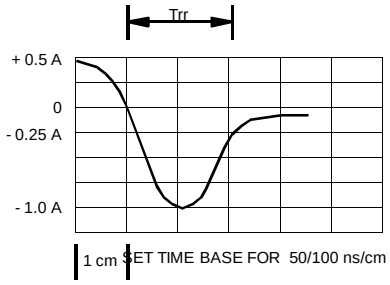
RATING	SYMBOL	BYW32	BYW33	BYW34	BYW35	BYW36	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	300	400	500	600	V
Maximum Maximum RMS voltage	V_{RMS}	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	200	300	400	500	600	V
Maximum Average Forward Current 0.375" (9.5mm) Lead Length at Ta=55°C	$I_{F(AV)}$	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)	Trr	200					ns
Thermal Resistance - Junction to Ambient (2)	RθJA	100					C/W
Junction Temperature Range	T_J	- 65 to + 175					°C
Storage Temperature Range	T_{STG}	- 65 to + 200					°C

Notes :
(1) Test Conditions : I_F = 0.5 A to I_R = 1 A ; measured at Irr = 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

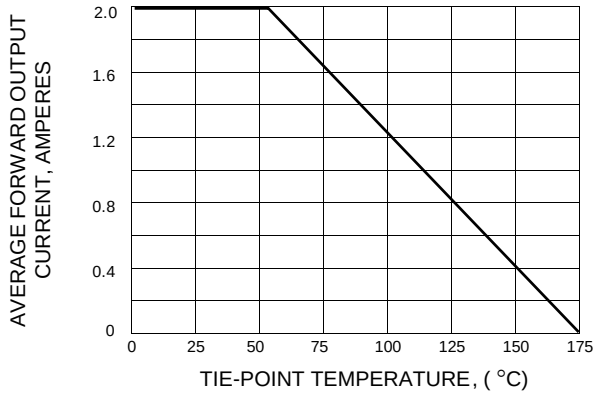


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

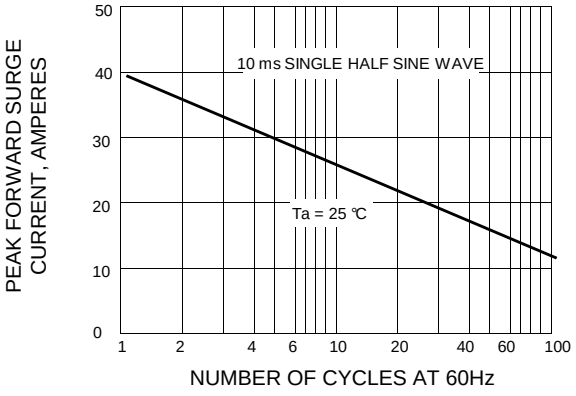


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

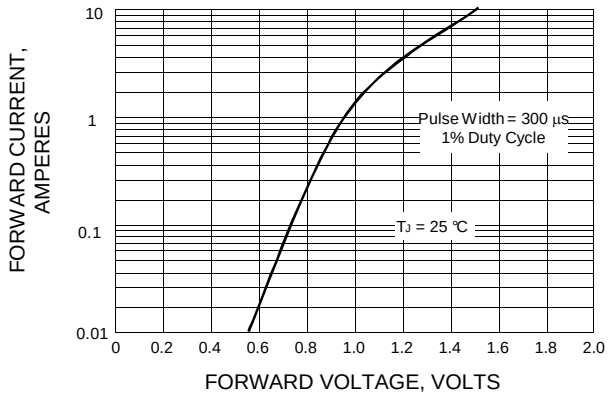


FIG.5 - TYPICAL REVERSE CHARACTERISTICS