

Silicon Diode

BYWB29-100

Fast Efficient Rectifier

100V / 8A

DATASHEET

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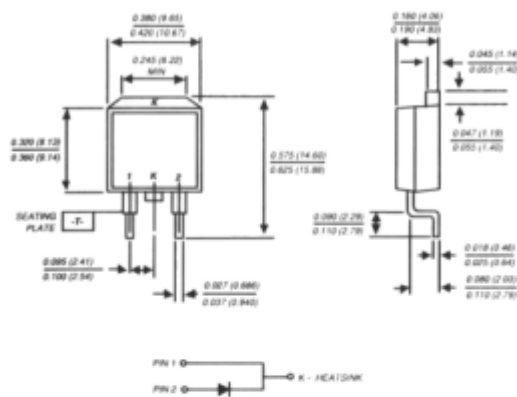
OEM – General Semiconductor

Source: General Semiconductor Databook 1998

NEW PRODUCT

NEW PRODUCT

NEW PRODUCT

BYWB29-50 THRU BYWB29-200**FAST EFFICIENT PLASTIC RECTIFIER****Reverse Voltage - 50 to 200 Volts****Forward Current - 8.0 Amperes****TO-263****FEATURES**

- ♦ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ♦ Glass passivated chip junction
- ♦ Low power loss
- ♦ Low leakage current
- ♦ High surge current capability
- ♦ Superfast recovery time for high efficiency
- ♦ High temperature soldering in accordance with CECC 802 / Reflow guaranteed

**MECHANICAL DATA****Case:** JEDEC TO-263AB molded plastic body**Terminals:** Plated lead solderable per MIL-STD-750, Method 2026**Polarity:** As marked**Mounting Position:** Any**Weight:** 0.08 ounce, 2.24 grams**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	BYWB29-50	BYWB29-100	BYWB29-150	BYWB29-200	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	35	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	50	100	150	200	Volts
Maximum average forward rectified current at $T_C=125^\circ\text{C}$	$I_{(AV)}$	8.0				Amps
Peak forward surge current 10ms single half sine-wave superimposed $T_J=150^\circ\text{C}$	I_{FSM}	100.0				Amps
Maximum instantaneous forward voltage at: $I_F=20\text{A}, T_J=25^\circ\text{C}$ $I_F=8\text{A}, T_J=150^\circ\text{C}$	V_F	1.3 0.8				Volts
Maximum DC reverse current at rated DC blocking voltage $T_C=25^\circ\text{C}$ $T_C=100^\circ\text{C}$	I_R	10.0 500.0				μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	25.0				ns
Typical junction capacitance (NOTE 2)	C_J	45.0				pF
Maximum thermal resistance (NOTE 3)	$R_{\theta JC}$	3.0				$^\circ\text{C/W}$
Operating and storage temperature range	T_J, T_{STG}	-65 to +150				$^\circ\text{C}$

NOTES:(1) Reverse recovery test conditions: $I_F=1\text{A}$, $V_R=30\text{V}$, $dI/dt=100\text{A}/\mu\text{s}$, $I_{rr}=10\%$, I_{RM} for measurement of t_{rr}

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to case mounted on heatsink

RATINGS AND CHARACTERISTIC CURVES BYWB29-50 THRU BYWB29-200

FIG. 1 - MAXIMUM FORWARD CURRENT
DERATING CURVE

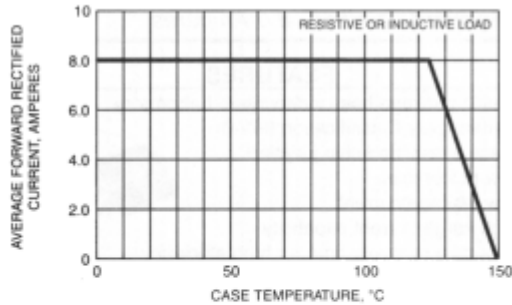


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

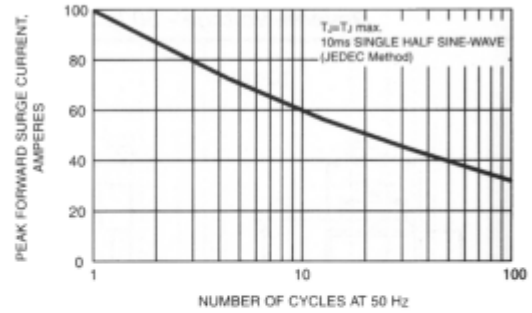


FIG. 3 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

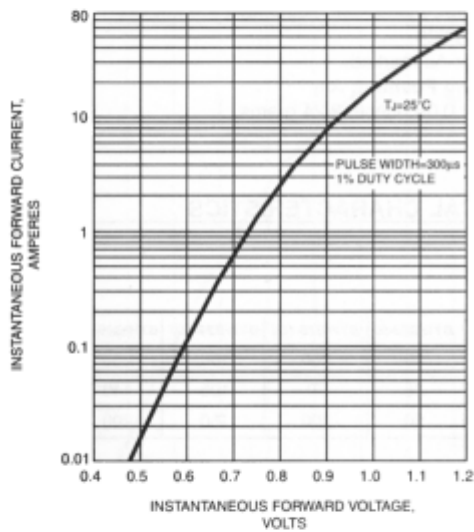


FIG. 4 - TYPICAL REVERSE LEAKAGE
CHARACTERISTICS

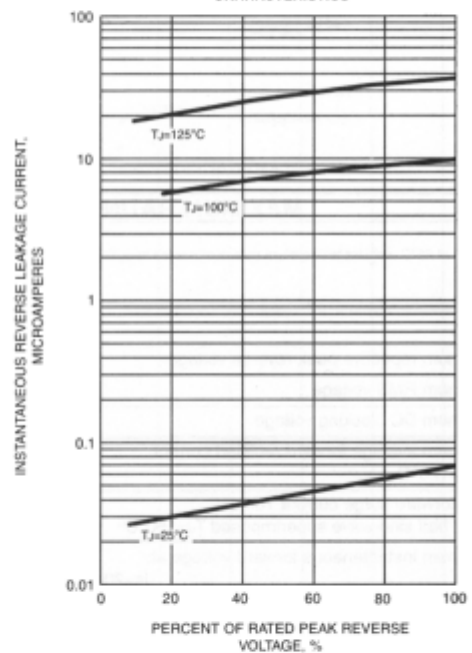


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

