Silicon Diode

BYVF32-200

Fast Efficient Rectifier

200V / 18A

DATASHEET

from

www.web-bcs.com

OEM – General Semiconductor

Source: General Semiconductor Databook 1998

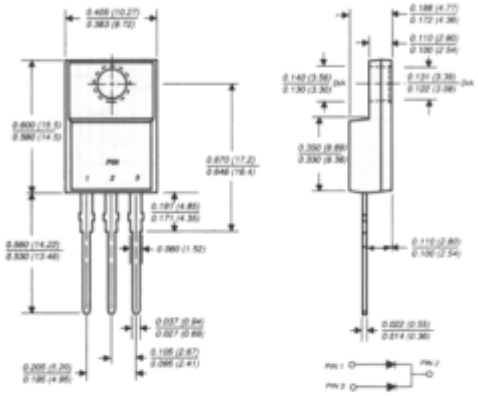
NEW PRODUCT **NEW PRODUCT** **NEW PRODUCT**

BYVF32-50 THRU BYVF32-200

FAST EFFICIENT PLASTIC RECTIFIER

***Reverse Voltage** - 50 to 150 Volts* ***Forward Current** - 18.0 Amperes*

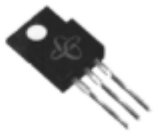
ITO-220AB



Dimensions in inches and (millimeters)

FEATURES

- Dual rectifier construction, positive centertap
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junctions
- Low power loss
- Low forward voltage, high current capability
- High surge capability
- Superfast recovery time for high efficiency
- High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds



MECHANICAL DATA

Case: JEDEC ITO-220AB molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.08 ounce, 2.24 grams
Mounting Torque: 5in -lbs. max.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	BYVF32-50	BYVF32-100	BYVF32-150	BYVF32-200	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=120°C	$I_{(AV)}$	18.0				Amps
Peak forward surge current 10ms single half sine-wave superimposed at at T_J=150°C	I_{FSM}	150.0				Amps
Maximum instantaneous forward voltage per leg at: I_F=20A, I_F=5.0A, T_J=100°C	V_F	1.15 0.85				Volts
Maximum DC reverse current T_C=25°C at rated DC blocking voltage T_C=100°C	I_R	10.0 600.0				µA
Maximum reverse recovery time per leg (NOTE 1)	t_{rr}	25.0				ns
Typical junction capacitance (NOTE 2)	C_J	45.0				pF
Maximum thermal resistance per leg (NOTE 3)	$R_{\theta JC}$	5.0				°C/W
Operating and storage temperature range	T_J, T_{STG}	-65 to +150				°C

NOTES:
(1) Reverse recovery test conditions: I_F=1A V_R=30V, di/dt=100A/µs, I_{rr}=10% I_{RM}
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
(3) Thermal resistance from junction to ambient and from junction to case per leg mounted on heatsink

RATINGS AND CHARACTERISTIC CURVES BYVF32-50 THRU BYVF32-200

FIG.1 - FORWARD CURRENT DERATING CURVE

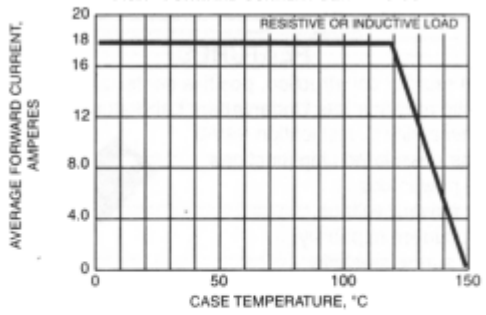


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

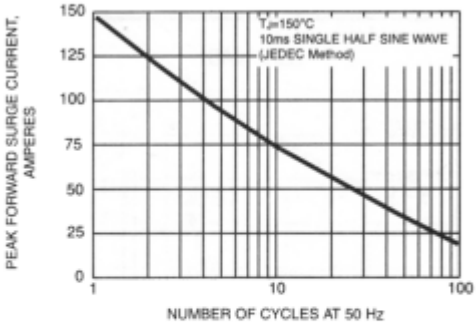


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

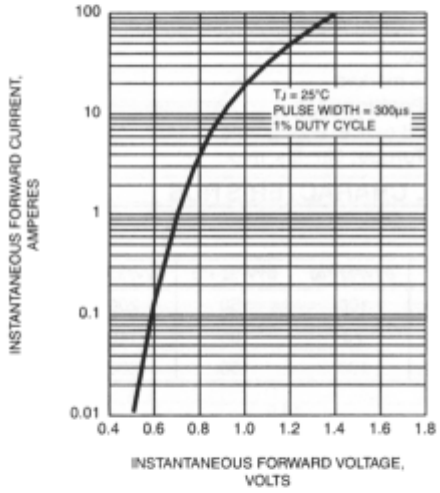


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

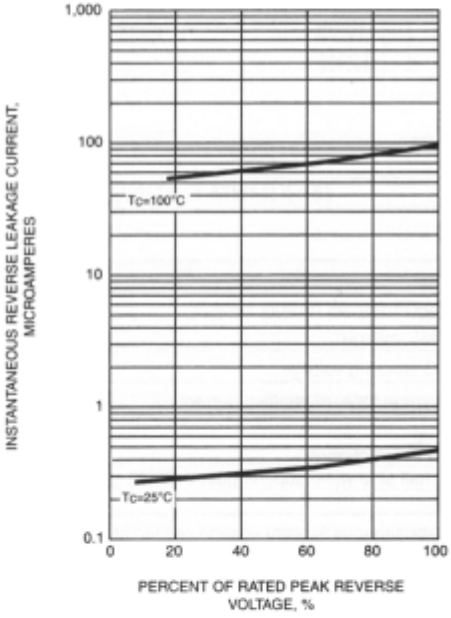


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG