BY500-100, BY500-200, BY500-400, BY500-600, BY500-800

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Vishay General Semiconductor

| ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted) | | | | | | | | | |
|--|--|-------------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------|
| PARAMETER | TEST CONDITIONS | | SYMBOL | BY500-100 | BY500-200 | BY500-400 | BY500-600 | BY500-800 | UNIT |
| Maximum instantaneous forward voltage | 5.0 A | | V _F | 1.35 | | | | | v |
| Maximum DC reverse current at rated DC blocking voltage | | T _A = 25 °C | | 10 | | | | | μA |
| | | T _A = 100 °C | I _R | | | 1.0 | | | mA |
| Maximum reverse recovery time | I _F = 1.0 A, V _R = 30 V, dl/dt = 50 A/μs, I _{rr} = 10 % I _{RM} | | t _{rr} | 200 | | | | ns | |
| Maximum reverse recovery current | | | I _{RM(REC)} | 2.0 | | | | А | |
| Typical junction capacitance | 4.0 V, 1 MHz | | CJ | 28 | | | pF | | |

| THERMAL CHARACTERISTICS ($T_A = 25 \text{ °C}$ unless otherwise noted) | | | | | | | |
|--|---------------------------------|-----------|-----------|-----------|-----------|-----------|------|
| PARAMETER | SYMBOL | BY500-100 | BY500-200 | BY500-400 | BY500-600 | BY500-800 | UNIT |
| Typical thermal resistance | R _{0JA} ⁽¹⁾ | 22 | | | | °C/W | |

Note

ISHA

⁽¹⁾ Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length with both leads to heat sink

| ORDERING INFORMATION (Example) | | | | | | | |
|--------------------------------|-----------------|------------------------|---------------|----------------------------------|--|--|--|
| PREFERRED P/N | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE | | | |
| BY500-400-E3/54 | 1.1 | 54 | 1400 | 13" diameter paper tape and reel | | | |
| BY500-400-E3/73 | 1.1 | 73 | 1000 | Ammo pack packaging | | | |

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

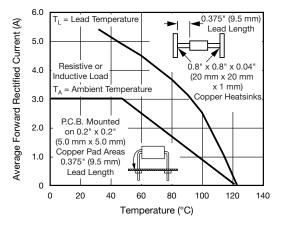


Fig. 1 - Forward Current Derating Curves

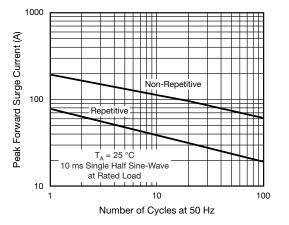
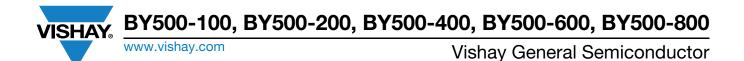


Fig. 2 - Maximum Peak Forward Surge Current

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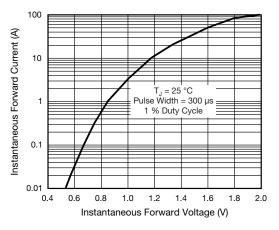


Fig. 3 - Typical Instantaneous Forward Characteristics

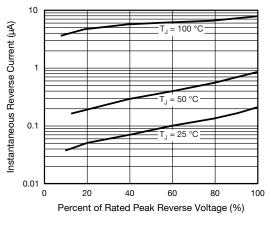
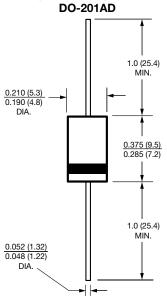


Fig. 4 - Typical Reverse Characteristics

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



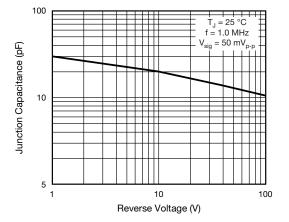


Fig. 5 - Typical Junction Capacitance

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