

Damper diode
fast, high-voltage

BY329-1500
BY329-1500S

STATIC CHARACTERISTICS

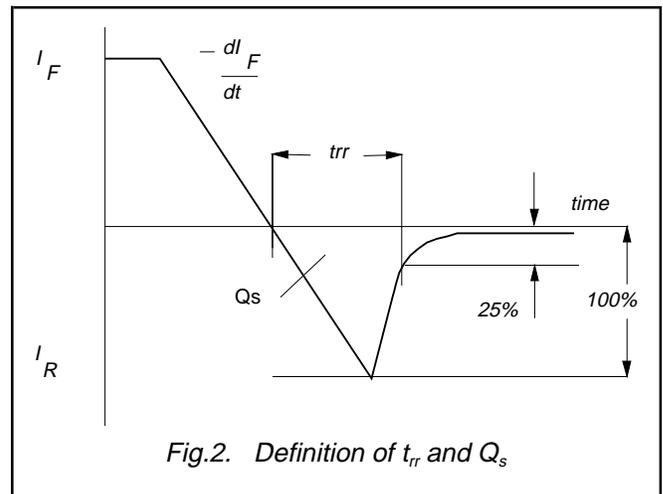
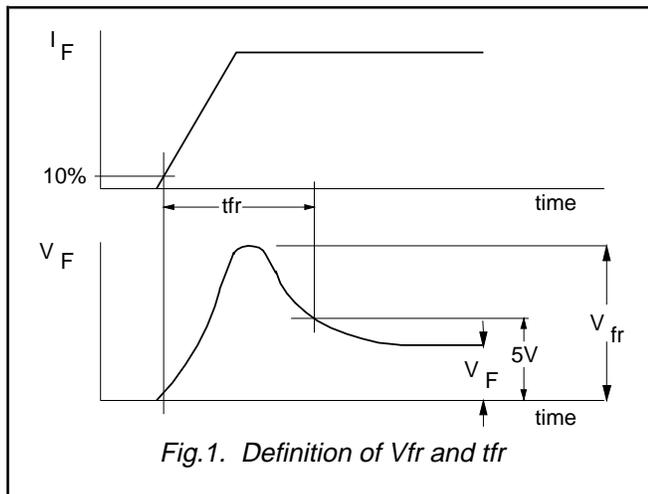
$T_j = 25\text{ }^\circ\text{C}$ unless otherwise stated

| SYMBOL | PARAMETER | CONDITIONS | TYP. | | MAX. | | UNIT |
|--------|-----------------|--|------|-------|------|-------|---------------|
| | | | 1500 | 1500S | 1500 | 1500S | |
| V_F | Forward voltage | $I_F = 6.5\text{ A}$ | 1.1 | 1.3 | 1.45 | 1.6 | V |
| I_R | Reverse current | $I_F = 6.5\text{ A}; T_j = 125\text{ }^\circ\text{C}$ | 1.05 | 1.2 | 1.35 | 1.5 | V |
| | | $V_R = 1300\text{ V}$ | - | 250 | - | 250 | μA |
| | | $V_R = 1300\text{ V}; T_j = 125\text{ }^\circ\text{C}$ | - | 1 | - | 1 | mA |

DYNAMIC CHARACTERISTICS

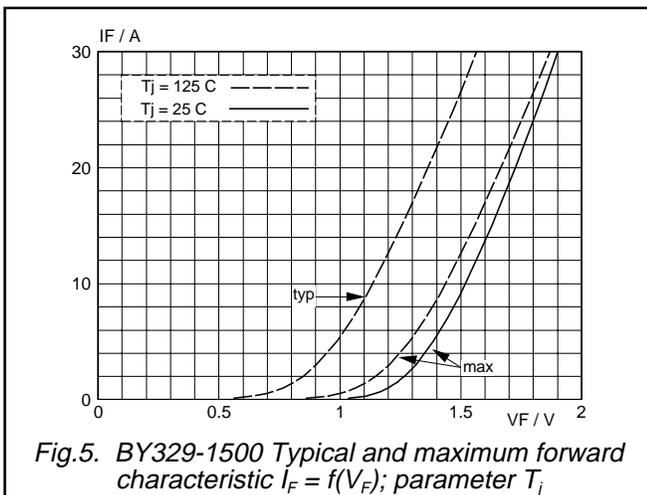
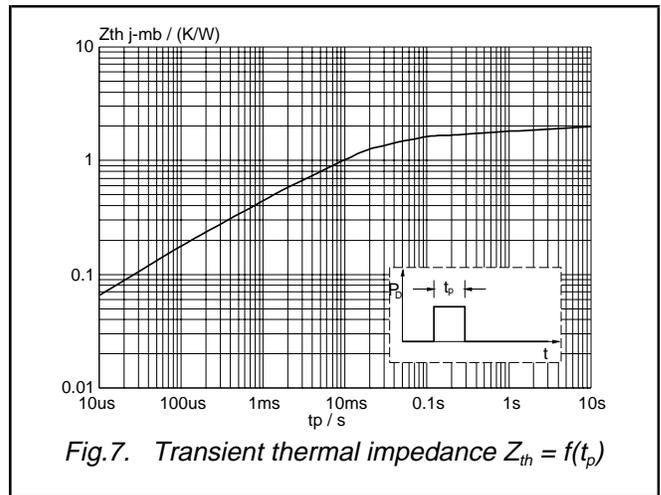
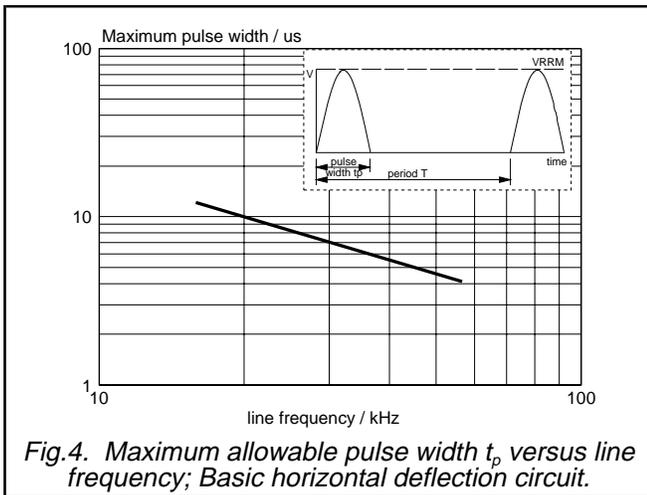
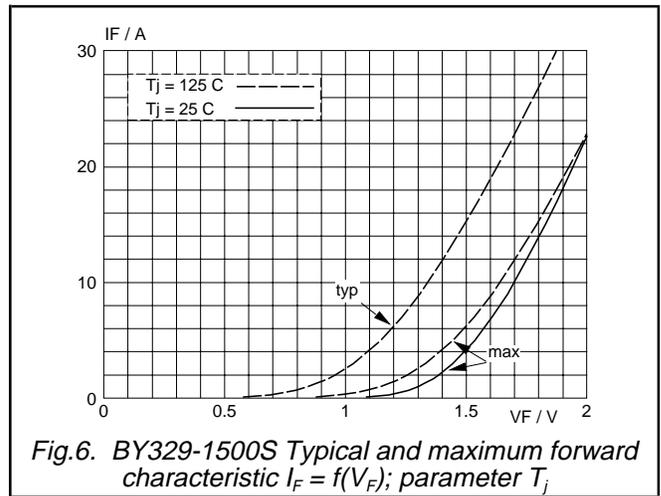
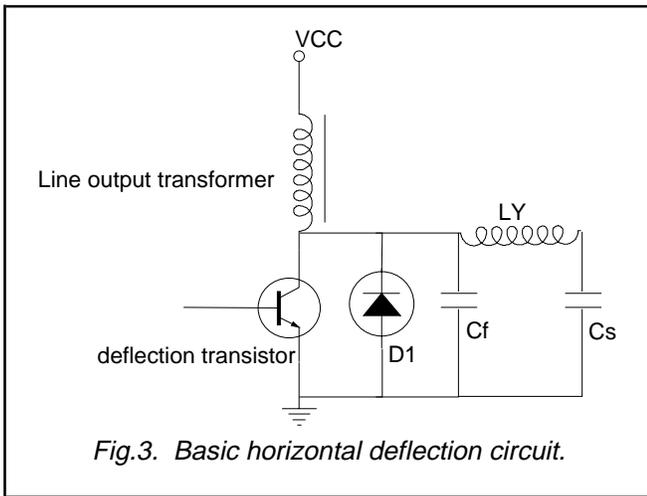
$T_j = 25\text{ }^\circ\text{C}$ unless otherwise stated

| SYMBOL | PARAMETER | CONDITIONS | TYP. | | MAX. | | UNIT |
|----------|-------------------------------|--|------|-------|------|-------|---------------|
| | | | 1500 | 1500S | 1500 | 1500S | |
| t_{rr} | Reverse recovery time | $I_F = 1\text{ A}; V_R \geq 30\text{ V};$ $di_F/dt = 50\text{ A}/\mu\text{s}$ | 0.18 | 0.13 | 0.23 | 0.16 | μs |
| Q_s | Reverse recovery charge | $I_F = 2\text{ A}; -di_F/dt = 20\text{ A}/\mu\text{s}$ | 1.6 | 0.7 | 2.0 | 0.95 | μC |
| V_{fr} | Peak forward recovery voltage | $I_F = 6.5\text{ A}; di_F/dt = 50\text{ A}/\mu\text{s}$ | 17 | 23 | 30 | 40 | V |
| t_{fr} | Forward recovery time | $I_F = 6.5\text{ A}; di_F/dt = 50\text{ A}/\mu\text{s}$ | 210 | 220 | 300 | 320 | ns |



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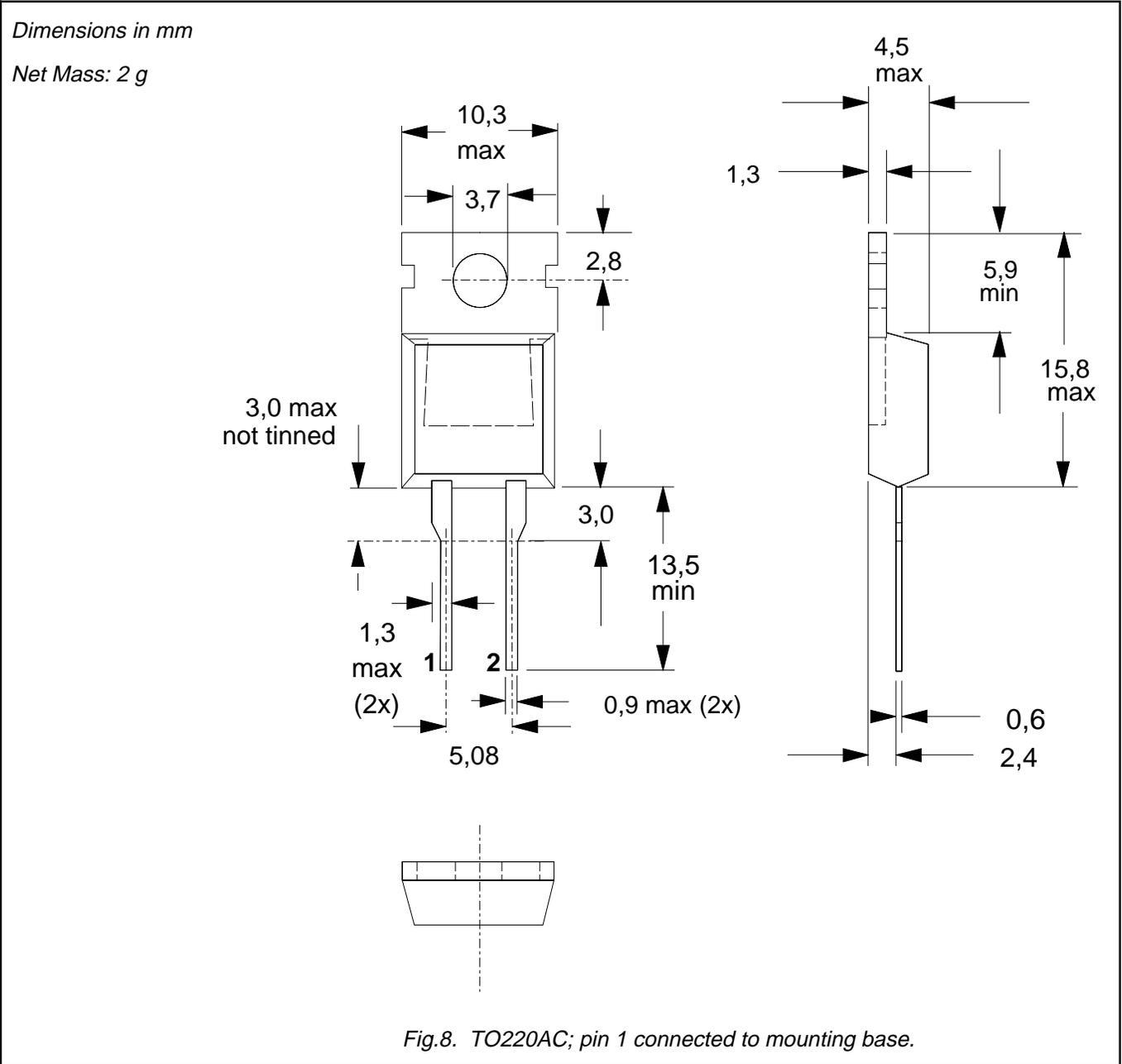
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MECHANICAL DATA



Notes

1. Refer to mounting instructions for TO220 envelopes.
2. Epoxy meets UL94 V0 at 1/8".

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DEFINITIONS

| | |
|--|---|
| Data sheet status | |
| Objective specification | This data sheet contains target or goal specifications for product development. |
| Preliminary specification | This data sheet contains preliminary data; supplementary data may be published later. |
| Product specification | This data sheet contains final product specifications. |
| Limiting values | |
| Limiting values are given in accordance with the Absolute Maximum Rating System (IEC 134). Stress above one or more of the limiting values may cause permanent damage to the device. These are stress ratings only and operation of the device at these or at any other conditions above those given in the Characteristics sections of this specification is not implied. Exposure to limiting values for extended periods may affect device reliability. | |
| Application information | |
| Where application information is given, it is advisory and does not form part of the specification. | |
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