

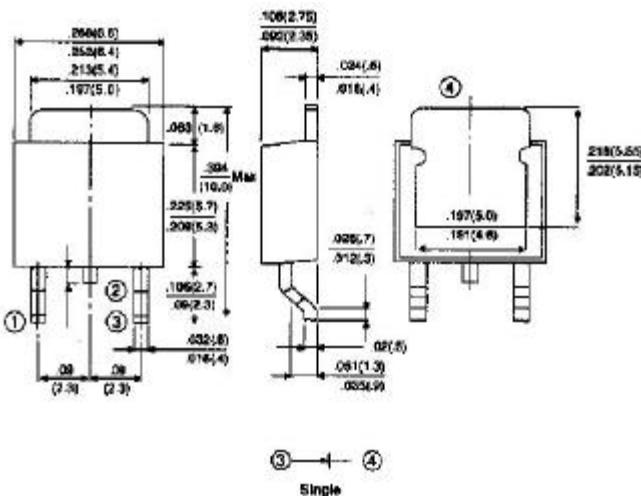
ER302D THRU ER303D

DPAK SURFACE MOUNT SUPERFAST RECTIFIER VOLTAGE - 200 to 300 Volts CURRENT - 3.0 Amperes

FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Superfast recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated junction
- High temperature soldering:
260 /10 seconds at terminals

D PAK/TO-252AA



MECHANICAL DATA

Case: D PAK/TO-252AA molded plastic

Terminals: Solder plated, solderable per MIL-STD-750,

Dimensions in inches and (millimeters)

Method 2026

Polarity: Color band denotes cathode

Standard packaging: 16mm tape (EIA-481)

Weight: 0.015 ounce, 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25° ambient temperature unless otherwise specified.

Resistive or inductive load.

| | SYMBOLS | ER302D | ER303D | UNITS | |
|---|----------------------|-------------|--------|---------|------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 200 | 300 | Volts | |
| Maximum RMS Voltage | V_{RMS} | 140 | 210 | Volts | |
| Maximum DC Blocking Voltage | V_{DC} | 200 | 300 | Volts | |
| Maximum Average Forward Rectified Current, at $T_C=75$ | $I_{(AV)}$ | 3.0 | | | Amps |
| Peak Forward Surge Current 8.3ms single half sine-Wave superimposed on rated load(JEDEC method) | I_{FSM} | 75.0 | | | Amps |
| Maximum Instantaneous Forward Voltage at 3.0A (Note 1) | V_F | 0.95 | 1.25 | Volts | |
| Maximum DC Reverse Current $T_A=25$ At Rated DC Blocking Voltage $T_A=100$ | I_R | 5.0 0.2 | | A mA | |
| Maximum Thermal Resistance (Note 2) | R_{JC} R_{JA} | 6.0 80.0 | | /W | |
| Maximum Reverse Recovery | T_{RR} | 35.0 | | nS | |
| Storage Temperature Range | T_{STG} | -50 to +150 | | | |

NOTES:

1. Pulse Test with PW=300 sec, 2% Duty Cycle.
2. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES

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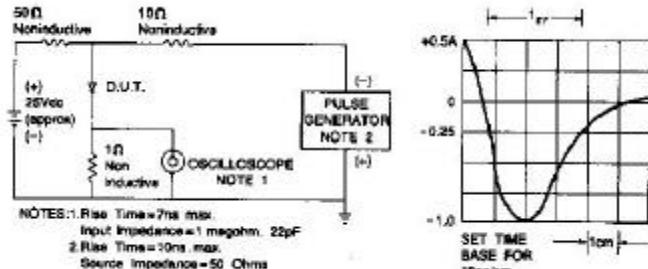


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

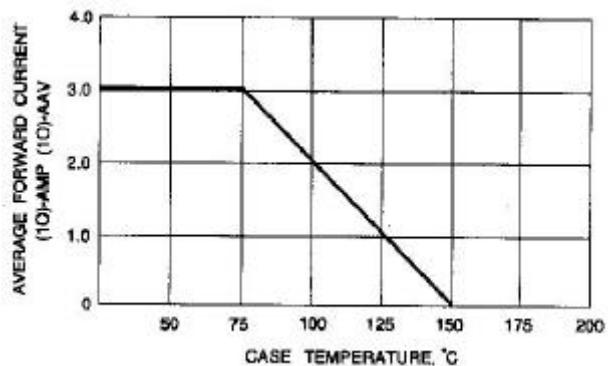


Fig. 2-MAXIMUM AVERAGE FORWARD CURRENT RATING

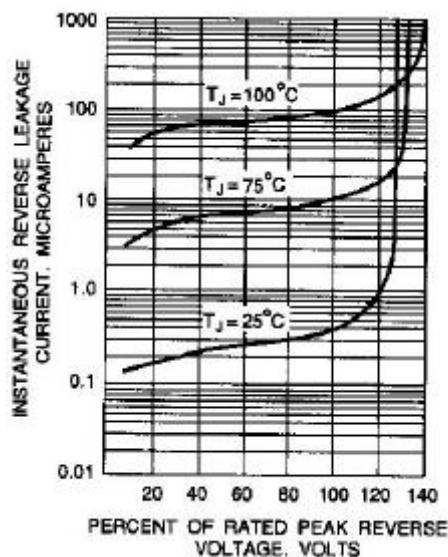


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

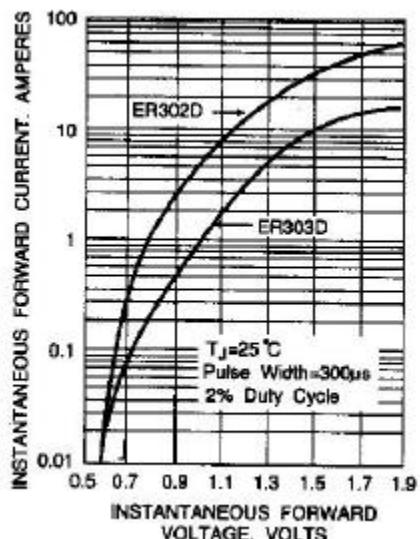


Fig. 4-TYPICAL FORWARD CAPACITANCE

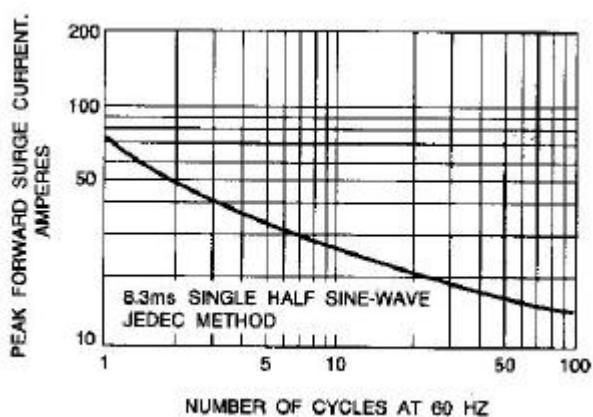


Fig. 5-MAXIMUM NON-REPETITIVE SURGE CURRENT

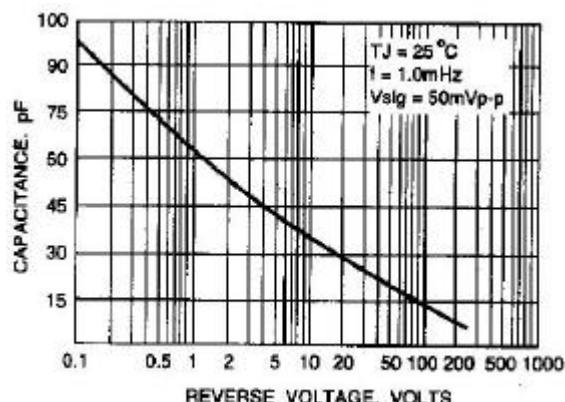


Fig. 6-TYPICAL JUNCTION CAPACITANCE