

15DF4 ~ 15DF8

PRV : 400 - 800 Volts

Io : 1.3 Amperes

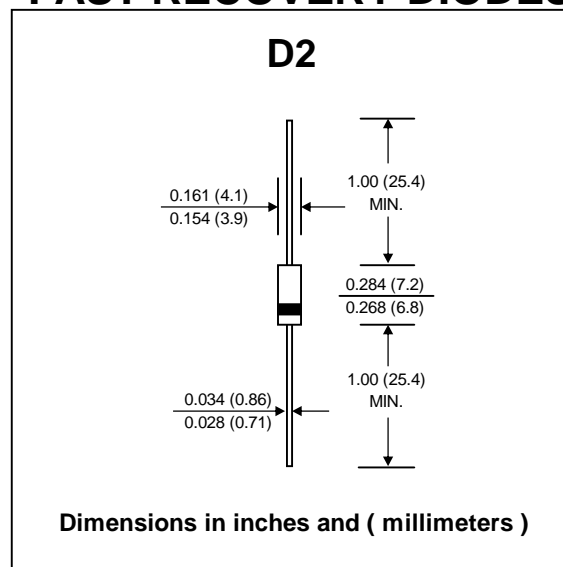
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : D2 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.465 gram

FAST RECOVERY DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| RATING | SYMBOL | 15DF4 | 15DF6 | 15DF8 | UNIT |
|---|--------|---------------|-------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 400 | 600 | 800 | V |
| Maximum RMS Voltage | VRMS | 280 | 420 | 560 | V |
| Maximum DC Blocking Voltage | VDC | 400 | 600 | 800 | V |
| Maximum Average Forward Current Ta = 40°C | IF(AV) | 1.3 | | | A |
| Maximum Peak Forward Surge Current, 8.3ms Single half sine wave | IFSM | 70 | | | A |
| Maximum Peak Forward Voltage at IF = 1.3 A | VF | 1.2 | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | IRM | 10 | | | μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 150 | | | ns |
| Junction Temperature Range | TJ | - 65 to + 150 | | | °C |
| Storage Temperature Range | TSTG | - 65 to + 150 | | | °C |

Note :

(1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

RATING AND CHARACTERISTIC CURVES (15DF4 ~ 15DF8)

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

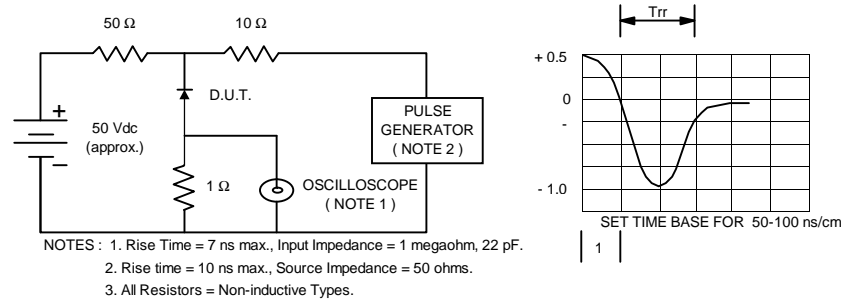


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

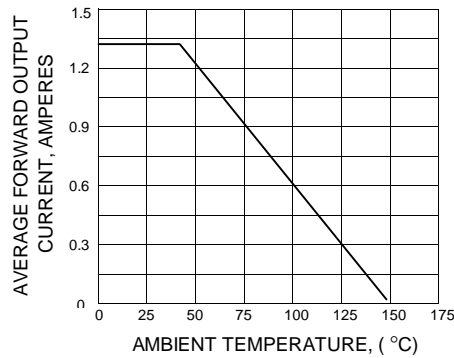


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

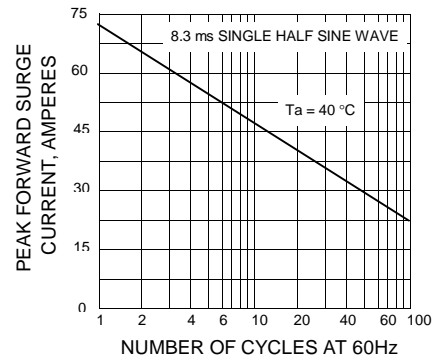


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

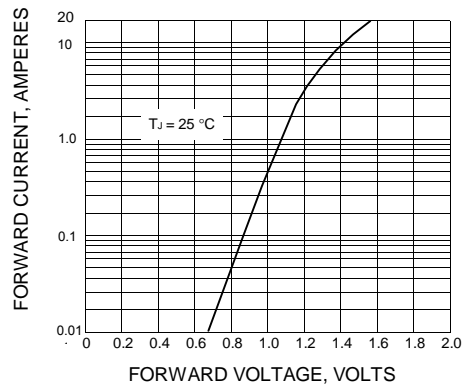


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

