

10ELS1 ~ 10ELS6

PRV : 100 ~ 400 Volts
Io : 1.0 Amperes

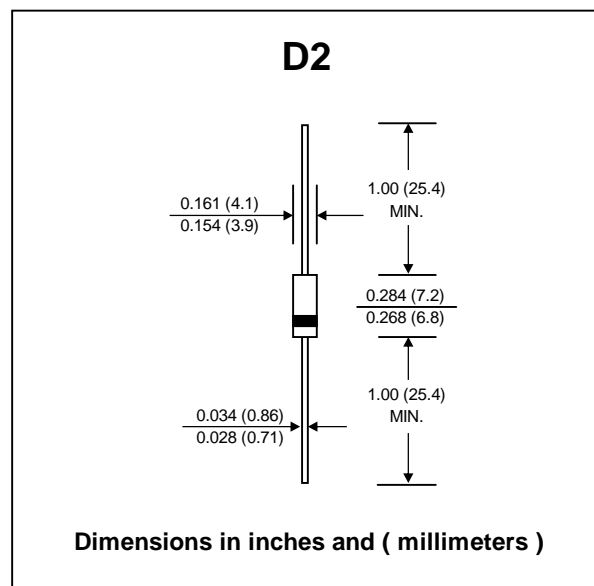
FEATURES :

- * 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 DIODE



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 | 10ELS1 | 10ELS2 | 10ELS4 | 10ELS6 | UNIT |
|--------------------------------------------------------------------|--------------------|---------------|--------|--------|--------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 100 | 200 | 400 | 600 | V |
| Maximum RMS Voltage | V _{RMS} | 70 | 140 | 210 | 280 | V |
| Maximum DC Blocking Voltage | V _{DC} | 100 | 200 | 400 | 600 | V |
| Maximum Average Forward Current | I _{F(AV)} | 1.0 | | | | A |
| Maximum Peak Forward Surge Current, 8.3ms Single half sine wave | I _{FSM} | 30 | | | | A |
| Maximum Peak Forward Voltage at I _F = 1.0 A | V _F | 1.1 | 1.15 | | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _{RM} | 10 | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | T _{rr} | 150 | | | | ns |
| Junction Temperature Range | T _J | - 65 to + 150 | | | | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 150 | | | | °C |

Note :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

RATING AND CHARACTERISTIC CURVES (10ELS1 ~ 10ELS6)

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

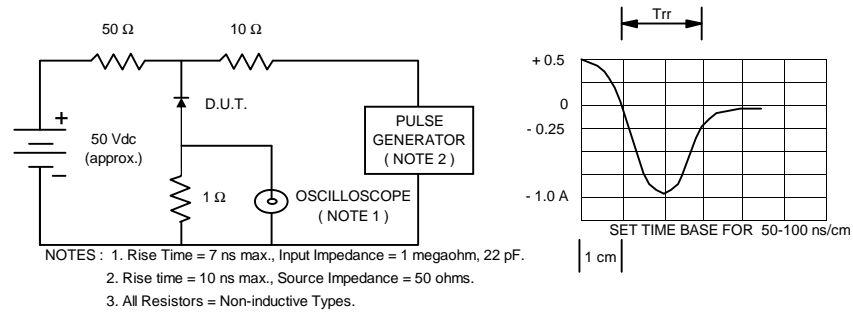


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

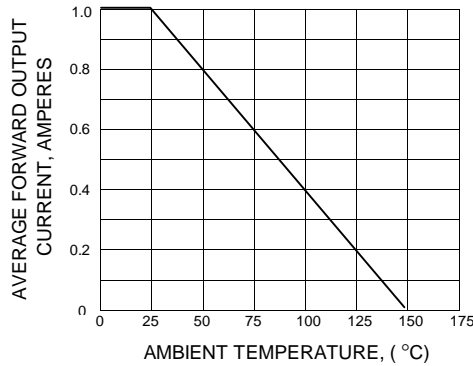


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

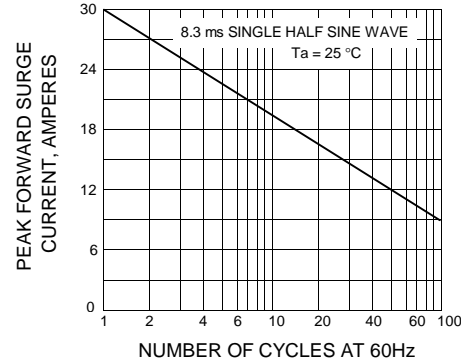


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

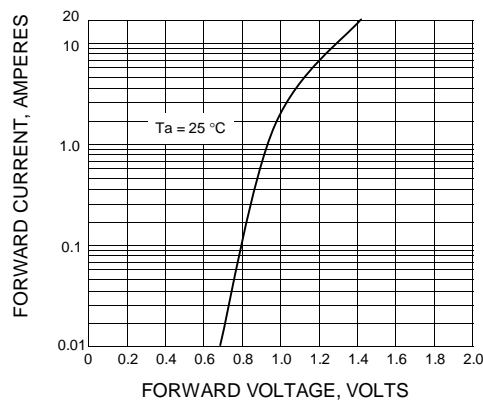


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

