

EU1 - EU1Z

PRV : 200 - 600 Volts
Io : 0.25 Ampere

FEATURES :

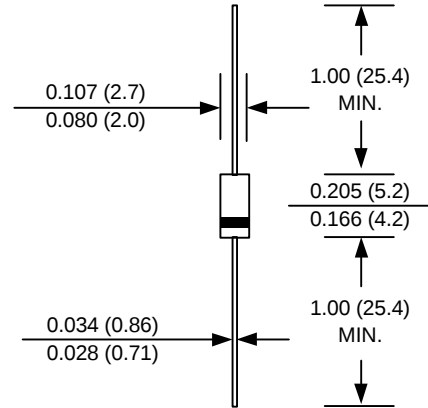
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-41 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 : 0.339 gram

FAST RECOVERY RECTIFIER DIODES

DO - 41



Dimensions in inches and (millimeters)

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	EU1Z	EU1	EU1A	UNIT
Maximum Peak Reverse Voltage	V_{RM}	200	400	600	V
Maximum Peak Reverse Surge Voltage	V_{RSM}	250	450	650	V
Maximum Reverse Voltage	V_R	200	400	600	V
Maximum Average Forward Current	$I_{F(AV)}$	0.25			A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sine wave, Single Shot)	I_{FSM}	15			A
Maximum Forward Voltage at $I_F = 0.25$ A	V_F	2.5			V
Maximum Reverse Current at $V_R = V_{RM}$ $T_a = 25$ °C	I_R	10			μA
Maximum Reverse Current at $V_R = V_{RM}$ $T_a = 100$ °C	$I_{R(H)}$	150			μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	0.4			μs
Junction Temperature Range	T_J	- 40 to + 150			°C
Storage Temperature Range	T_{STG}	- 40 to + 150			°C

Notes :

(1) Reverse Recovery Test Conditions : $I_F = 10$ mA, $I_{RP} = 10$ mA.

RATING AND CHARACTERISTIC CURVES (EU1 - EU1Z)

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

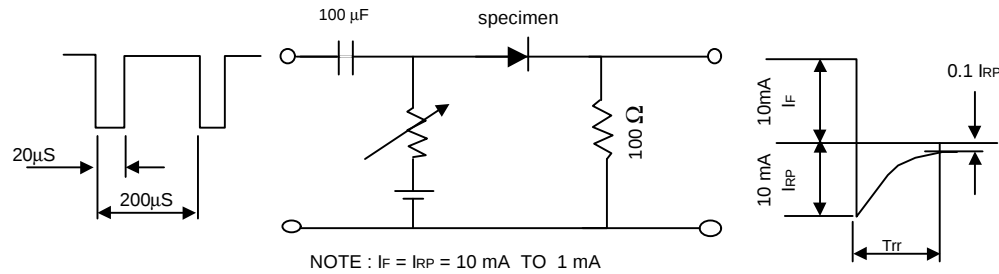


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

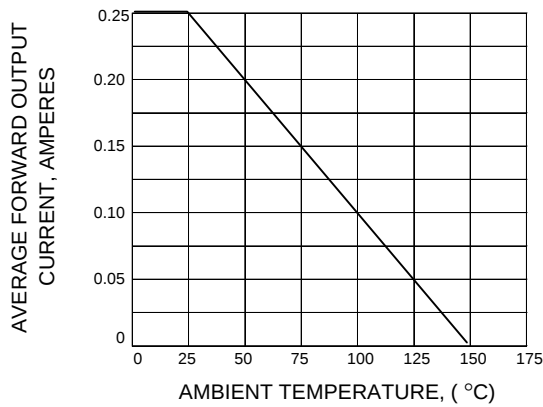


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

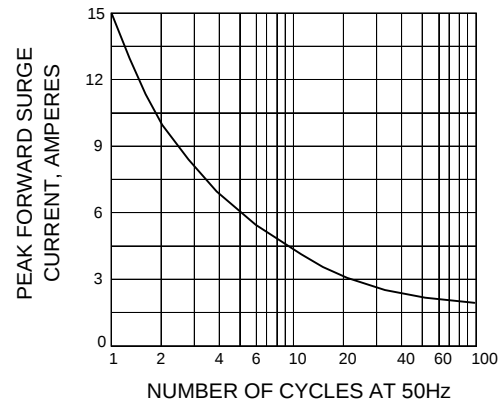


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

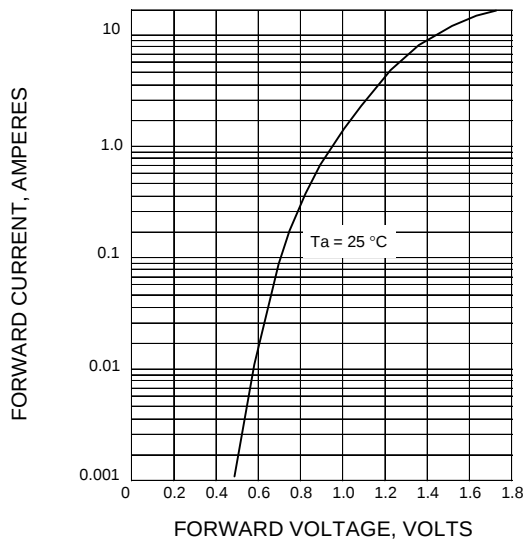


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

