

# EL1Z

# ULTRA FAST RECOVERY RECTIFIER DIODES

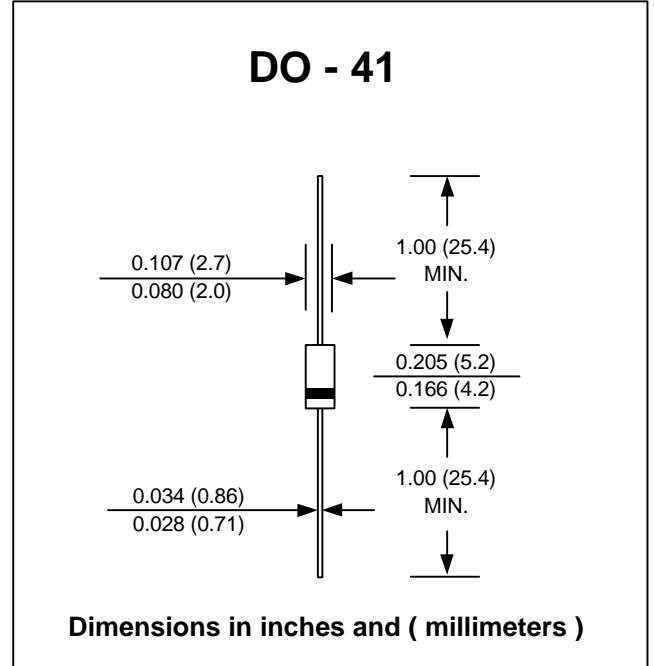
**PRV : 200 Volts**  
**Io : 1.5 Ampere**

**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



**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	VALUE	UNIT
Maximum Peak Reverse Voltage	VRM	200	V
Maximum Peak Reverse Surge Voltage	VRSM	200	V
Maximum Average Rectified Forward Current	IF(AV)	1.5	A
Maximum Peak Forward Surge Current ( 50 Hz, Half-cycle, Sine wave, Single Shot )	IFSM	20	A
Maximum Forward Voltage at IF = 1.5 A	VF	0.98	V
Maximum Reverse Current at Reverse voltage	IR	100	µA
Maximum Reverse Current at Reverse voltage Ta = 100 °C	IR(H)	500	µA
Maximum Reverse Recovery Time ( Note 1 )	Trr	50	ns
Junction Temperature Range	TJ	- 40 to + 150	°C
Storage Temperature Range	TSTG	- 40 to + 150	°C

**Notes :**

( 1 ) Reverse Recovery Test Conditions : IF = 100 mA, IRP = 100 mA.

## RATING AND CHARACTERISTIC CURVES ( EL1Z )

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

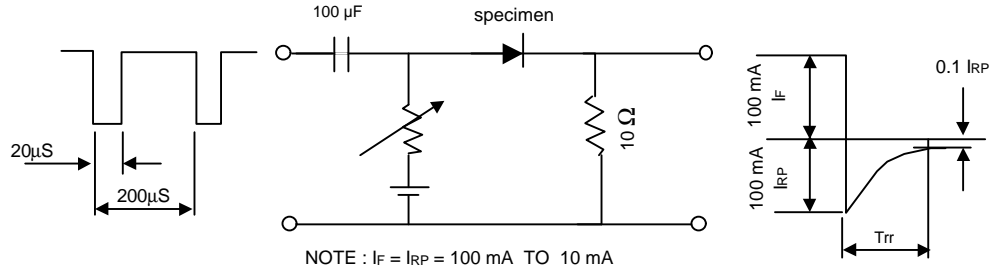


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

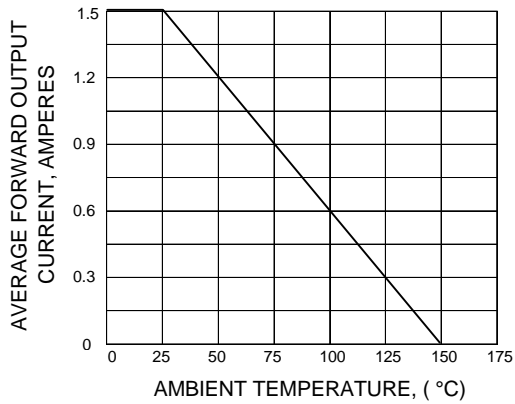


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

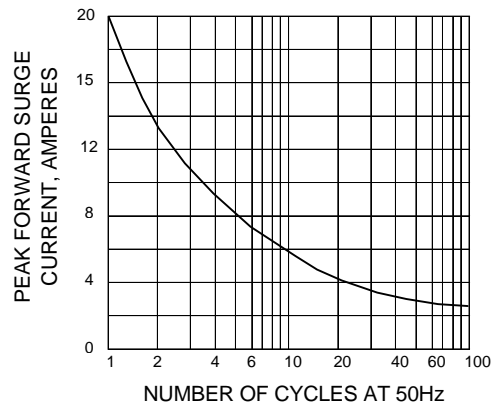


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

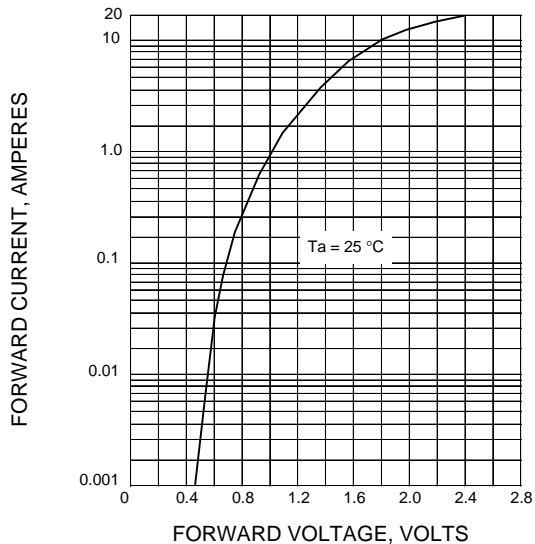


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

