

# ERA38-04 ~ ERA38-06

## FAST RECOVERY DIODE

**PRV : 400 - 600 Volts**

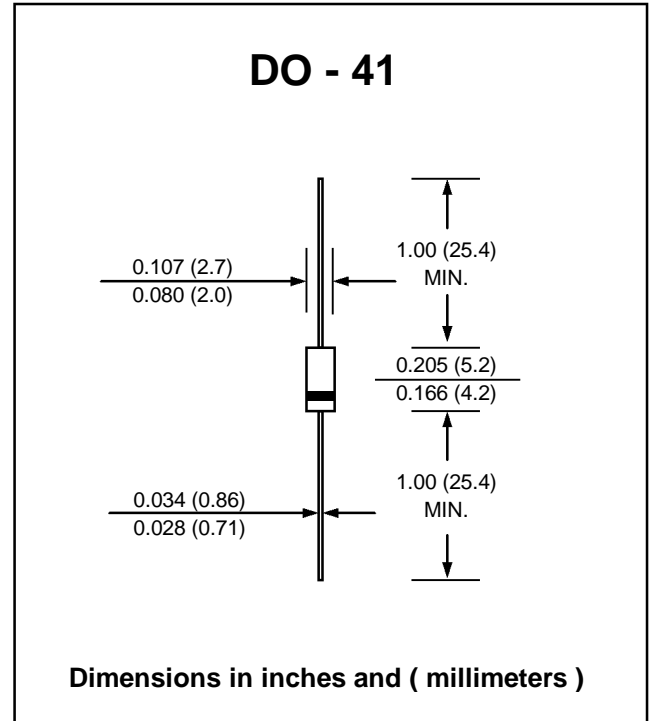
**Io : 0.5 Ampere**

### 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 : 0.34 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%.

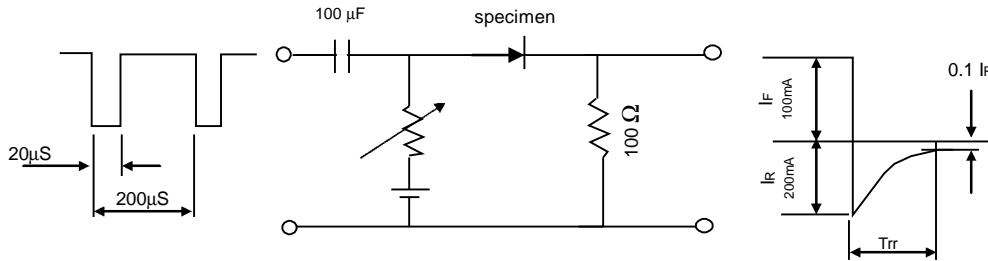
RATING	SYMBOL	ERA38-04	ERA38-05	ERA38-06	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	400	500	600	V
Maximum DC Blocking Voltage	VDC	320	400	480	V
Maximum Average Forward Current	IF(AV)	0.5			A
Maximum Peak Forward Surge Current ( Sine wave, 10 ms )	IFSM	10			A
Maximum Forward Voltage at IF = 0.5 A	VF	2.5			V
Maximum Reverse Current at VRRM	IRRM	50			µA
Maximum Reverse Recovery Time ( Note 1 )	Trr	0.05			µs
Junction Temperature Range	TJ	- 40 to + 150			°C
Storage Temperature Range	TSTG	- 40 to + 150			°C

**Note :**

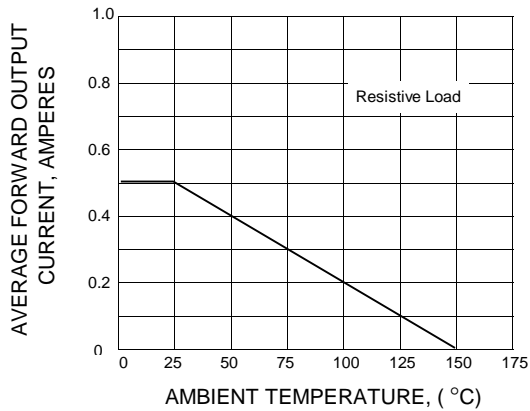
( 1 ) Reverse Recovery Test Conditions : IF = 100 mA, IR = 200 mA.

**RATING AND CHARACTERISTIC CURVES ( ERA38-04 ~ ERA38-06 )**

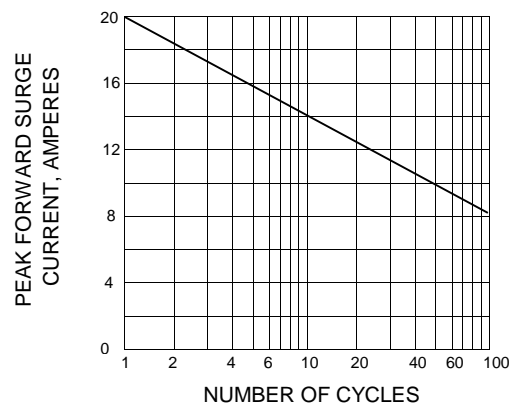
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



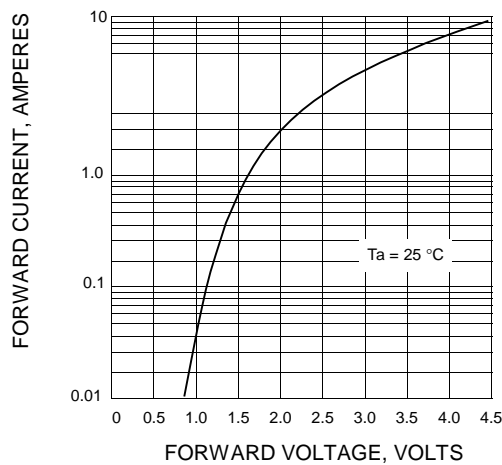
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

