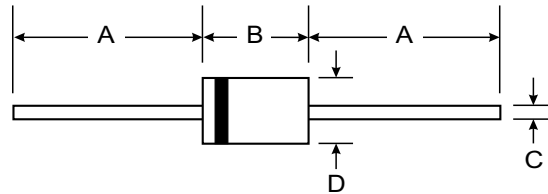


## Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0



## Mechanical Data

- Case: JEDEC DO-41, molded plastic
- Terminals: Axial lead, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces, 0.34 grams
- Mounting position: Any

DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

## Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

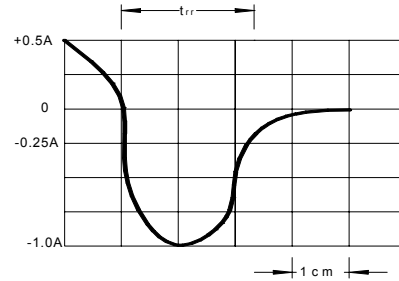
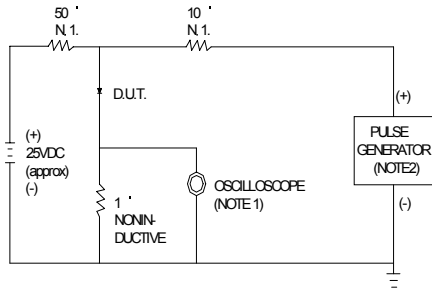
		EGP 10A	EGP 10B	EGP 10C	EGP 10D	EGP 10F	EGP 10G	UNITS
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	300	400	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	105	140	210	280	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	300	400	V
Maximum average forward rectified current 9.5mm lead length @ T <sub>A</sub> =75°C:	I <sub>F(AV)</sub>	1.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ T <sub>J</sub> =125°C:	I <sub>FSM</sub>	30.0						A
Maximum instantaneous forward voltage @ 1.0 A	V <sub>F</sub>	0.95				1.25		V
Maximum reverse current @ T <sub>A</sub> =25°C: at rated DC blocking voltage @ T <sub>A</sub> =125°C:	I <sub>R</sub>	5.0 100.0						μA
Maximum reverse recovery time (Note1)	t <sub>rr</sub>	50						ns
Typical junction capacitance (Note2)	C <sub>J</sub>	22				15		pF
Typical thermal resistance (Note3)	R <sub>θJA</sub>	50						°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 ---- + 150						°C
Storage temperature range	T <sub>STG</sub>	- 55 ---- + 150						°C

NOTE: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

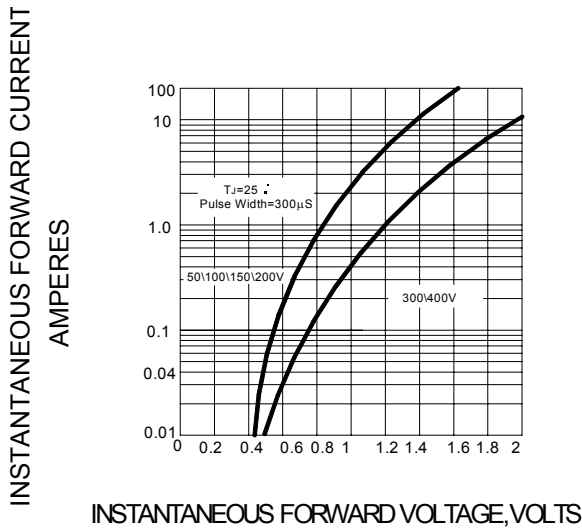
**FIG.1 –TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



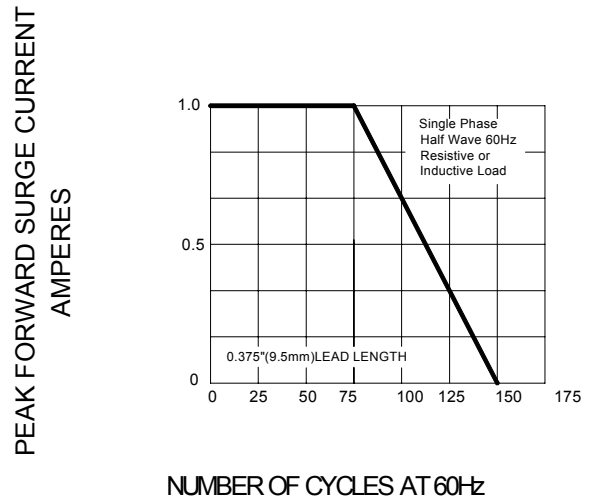
NOTES: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1MΩ.22pF  
2. RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω

SET TIME BASE FOR 20/30 ns/cm

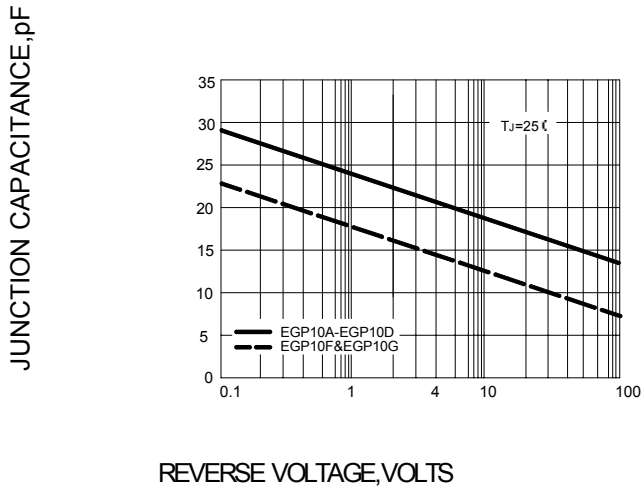
**FIG.3 –TYPICAL FORWARD CHARACTERISTICS**



**FIG.4–TYPICAL REVERSE CHARACTERISTICS**



**FIG.5–TYPICAL JUNCTION CAPACITANCE**



**FIG.6–FORWARD DERATING CURVE**

