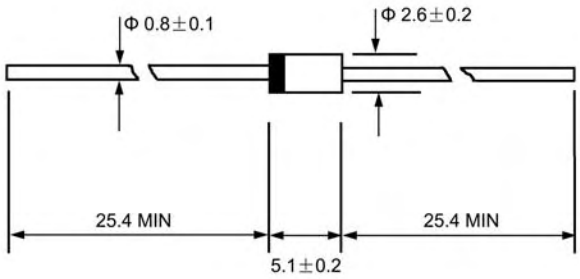
EGP10A-EGP10G

High Efficiency Rectifiers

VOLTAGE RANGE: 50 --- 400 V
CURRENT: 1.0 A

DO - 41



Dimensions in millimeters

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
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.012 ounces,0.34 grams
- ◇ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		EGP 10A	EGP 10B	EGP 10C	EGP 10D	EGP 10F	EGP 10G	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	V
Maximum average forw ard rectified current 9.5mm lead length @T_A=75℃	$I_{F(AV)}$	1.0						A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	30.0						A
Maximum instantaneous forw ard voltage @ 1.0 A	V_F	0.95				1.25		V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=125℃	I_R	5.0 100.0						μA
Maximum reverse recovery time (Note1)	t_{rr}	50						ns
Typical junction capacitance (Note2)	C_J	22				15		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	50						℃/W
Operating junction temperature range	T_J	- 55 ---- + 150						℃
Storage temperature range	T_{STG}	- 55 ---- + 150						℃

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

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

3.Thermal resistance from junction to ambient.

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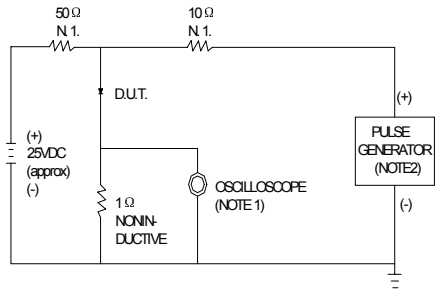
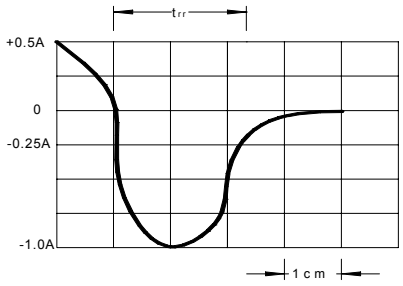
Ratings AND Charactieristic Curves

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

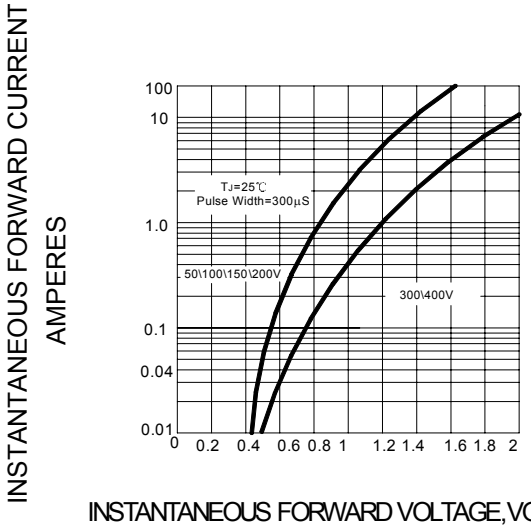


FIG.4–TYPICAL REVERSE CHARACTERISTICS

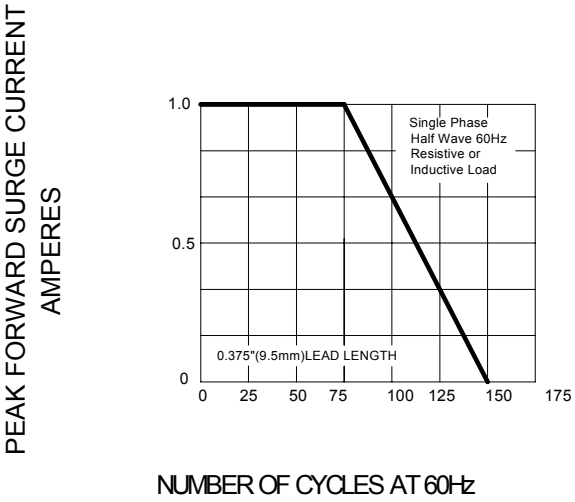


FIG.5–TYPICAL JUNCTION CAPACITANCE

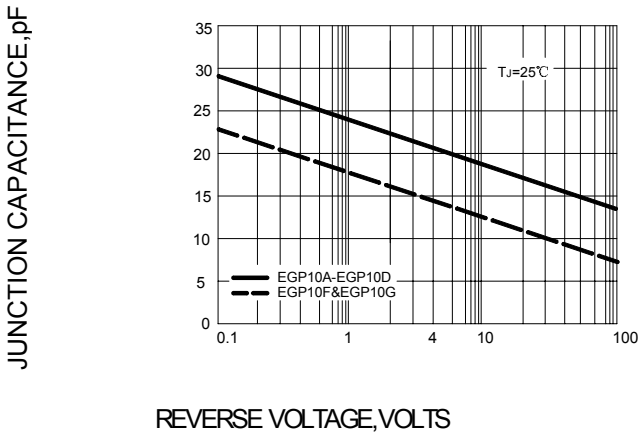


FIG.6–FORWARD DERATING CURVE