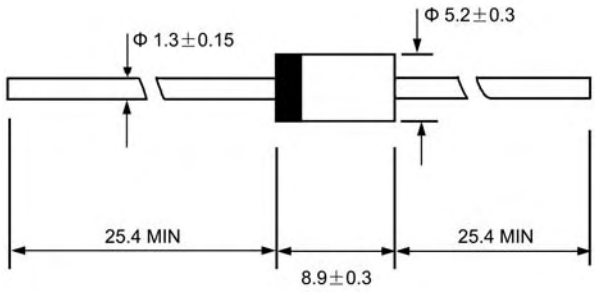
RG4Y-RG4C

High Efficiency Rectifiers

VOLTAGE RANGE: 70--- 1000 V
CURRENT: 2.0--- 3.5 A



DO - 27



Dimensions in millimeters

Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with freon, alcohol, Isopropand and similar solvents

Mechanical Data

- ◇ Case: JEDEC DO-27, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.041 ounces, 1.15grams
- ◇ Mounting: 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%.

		RG4Y	RG4Z	RG4	RG4A	RG4C	UNITS
Maximum peak repetitive reverse voltage	V_{RRM}	70	200	400	600	1000	V
Maximum RMS voltage	V_{RMS}	49	140	280	420	700	V
Maximum DC blocking voltage	V_{DC}	70	200	400	600	1000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	3.5	3.0		2.0		A
Peak forw ard surge current 10ms single half-sine-w ave superimplsed on rated load @T_J=125℃	I_{FSM}	100.0	80.0		50.0	60.0	A
Maximum instantaneous forw ard voltage @ I_F=$I_{F(AV)}$	V_F	1.3	1.7	1.8	2.0	3.0	V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	1000.0 5000.0		500.0 2500.0			μA
Maximum reverse recovery time (Note1)	t_{rr}	50					ns
Typical junction capacitance (Note2)	C_J	70			50		pF
Typical thermal resistance (Note3)	$R_{\theta JL}$	8					℃/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 voltage of 4.0V DC.

3.Thermal resistance junction to ambient.

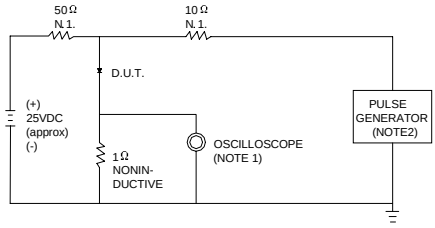
http://www.luguang.cn **mail:lge@luguang.cn**

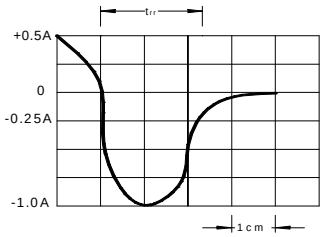
RG4Y-RG4C

High Efficiency Rectifiers

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=50 Ω.

SET TIME BASE FOR 10/20 ns/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

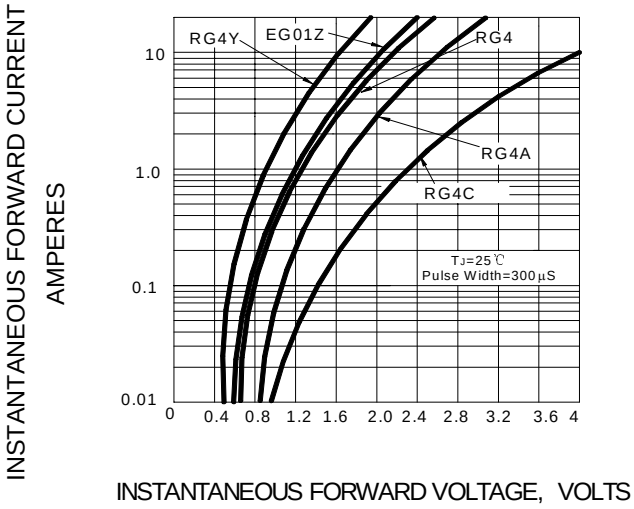


FIG.3 – FORWARD DERATING CURVE

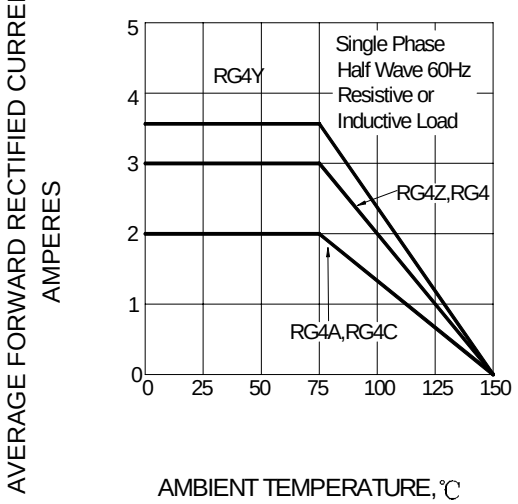


FIG.4 – PEAK FORWARD SURGE CURRENT

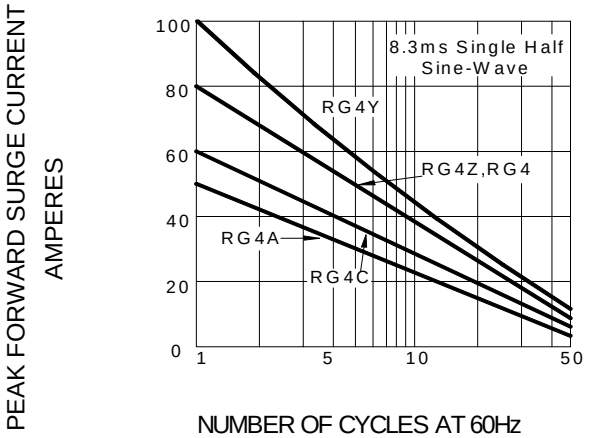


FIG.5--TYPICAL JUNCTION CAPACITANCE

