



Super Fast Rectifiers

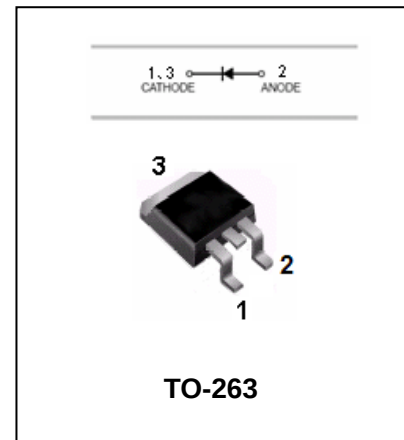
GF820B---GF860B

FEATURES

- Low cost.
- Diffused junction.
- Low forward voltage drop.
- Glass passivated junction.
- High current capability.
- Easily cleaned with Alcohol, Isopropanol and Similar solvents.
- The plastic material carries U/L recognition 94V-0.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	GF 820B	GF 830B	GF 840B	GF 850B	GF 860B	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	200	300	400	500	600	V
V_{RMS}	RMS Voltage	140	210	280	350	420	V
V_{DC}	DC Blocking Voltage	200	300	400	500	600	V
$I_{(AV)}$	Average Forward Rectified Current Total Device @ $T_A=100^{\circ}C$	8.0					A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave Superimposed on Rstd Load	125					A
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case	5.0					$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150					$^{\circ}C$

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GF820B---GF860B

ELECTRICAL CHARACTERISTICS@ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	GF820B	GF830B - GF840B	GF850B - GF860B	UNIT
			MAX			
Reverse Current	I _R	V _R =V _{RRM} , T _A =25℃ V _R =V _{RRM} , T _A =100℃	5.0 250	10 400		μ A
Forward Voltage	V _F (Note1)	I _F =8A	0.98	1.3	1.7	V
Reverse Recovery Time	t _{rr}	I _F =0.5A, I _R =1A, I _{rr} =0.25A	30			ns

Note:1.Pulse test:pulse width=300us,duty cycle $\leq$ 2.0%.

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

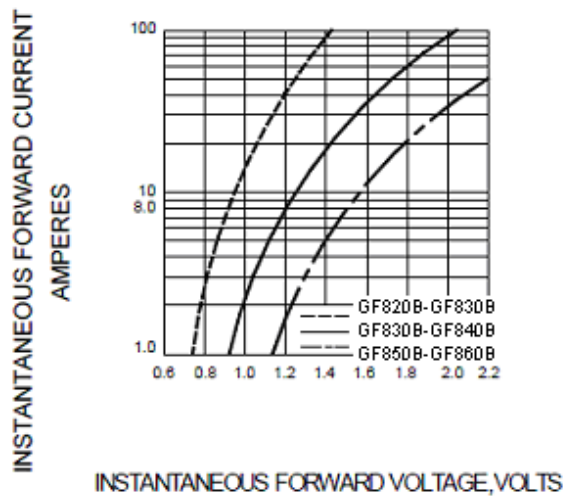


FIG.2 –TYPICAL REVERSE CHARACTERISTICS

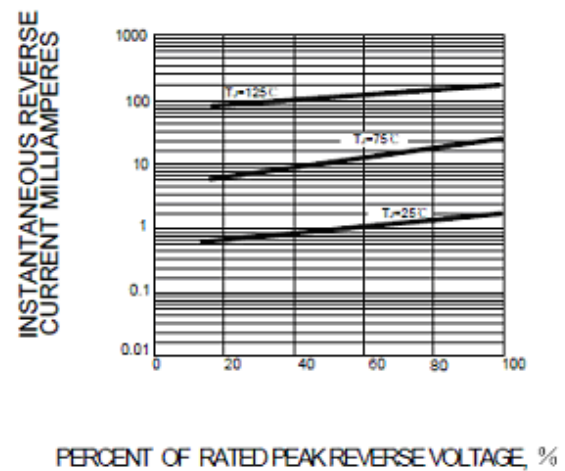


FIG.3 – PEAK FORWARD SURGE CURRENT

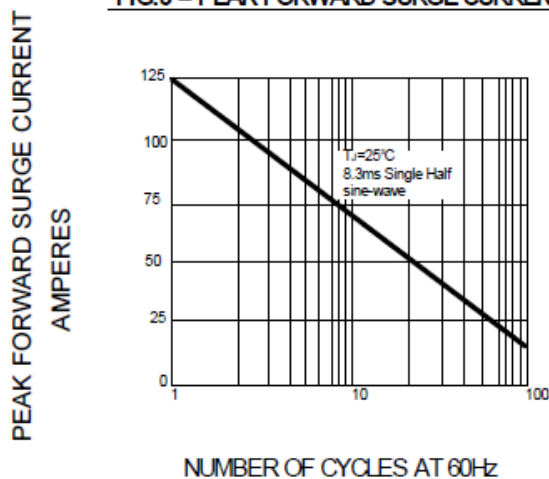
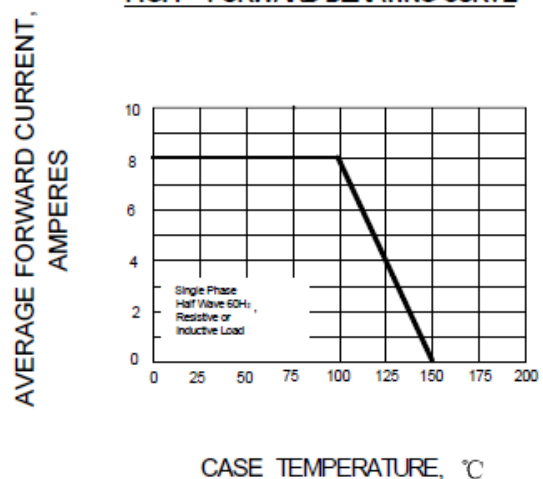


FIG.4 – FORWARD DERATING CURVE



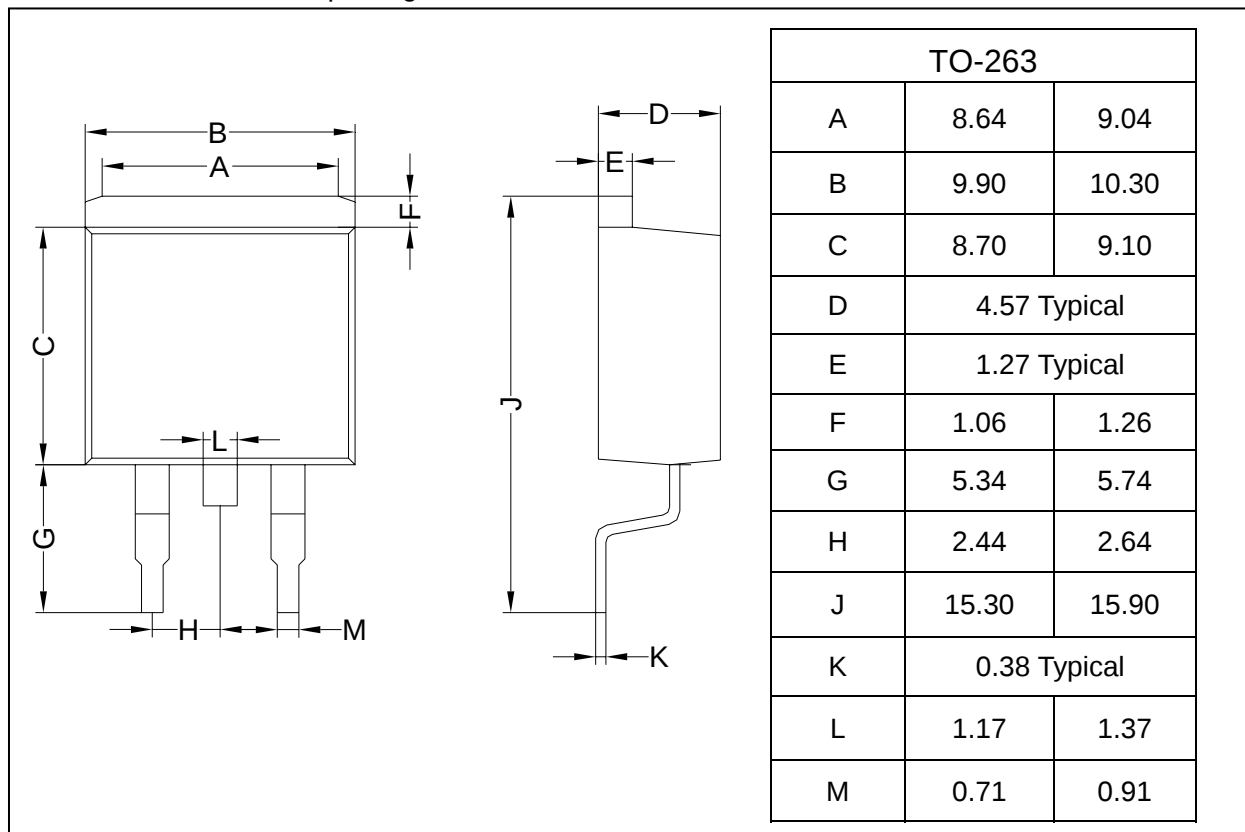
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GF820B---GF860B

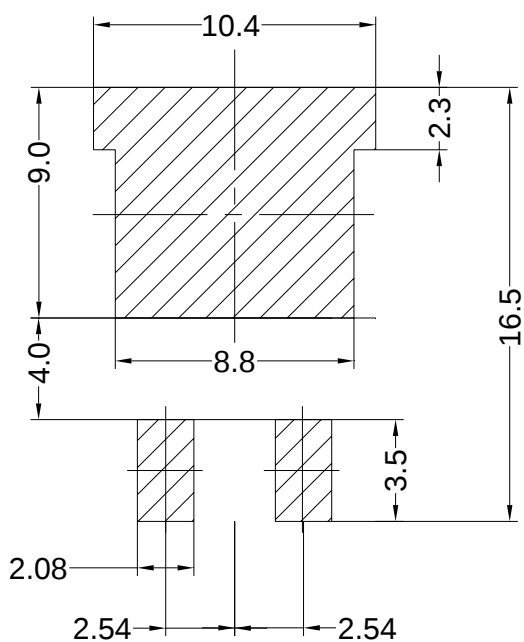
PACKAGE OUTLINE

Plastic surface mounted package

TO-263



SOLDERING FOOTPRINT



Unit:mm