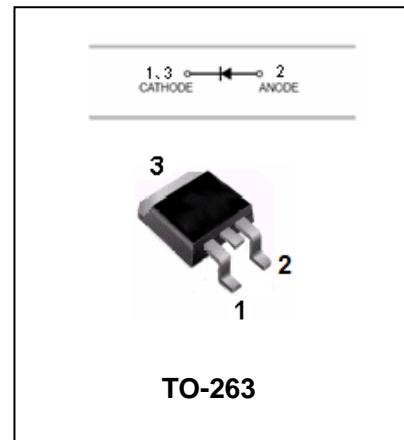


Super Fast Rectifiers

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.



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 Rsted Load	125					A
$R_{\theta Jc}$	Typical Thermal Resistance Junction to Case	5.0					$^{\circ}C/W$
$T_j T_{stg}$	Operating Junction and Torage Temperature Range	-55 to +150					$^{\circ}C$



Super Fast Rectifiers

GF820B---GF860B

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	GF820B	GF830B - GF840B	GF850B - GF860B	UNIT
			MAX			
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=100^\circ\text{C}$	5.0 250	10 400		μA
Forward Voltage	V_F (Note1)	$I_F=8\text{A}$	0.98	1.3	1.7	V
Reverse Recovery Time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	30			ns

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

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

FIG.1 -TYPICAL FORWARD CHARACTERISTIC

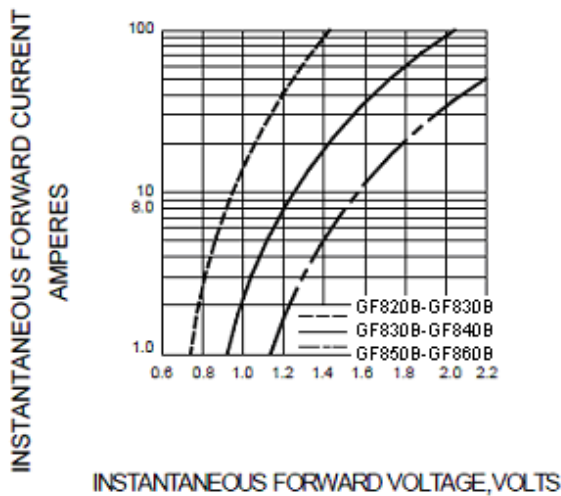


FIG.2-TYPICAL REVERSE CHARACTERISTICS

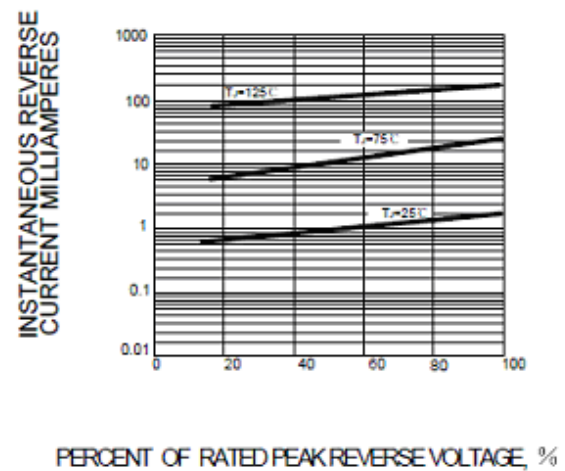


FIG.3 - PEAK FORWARD SURGE CURRENT

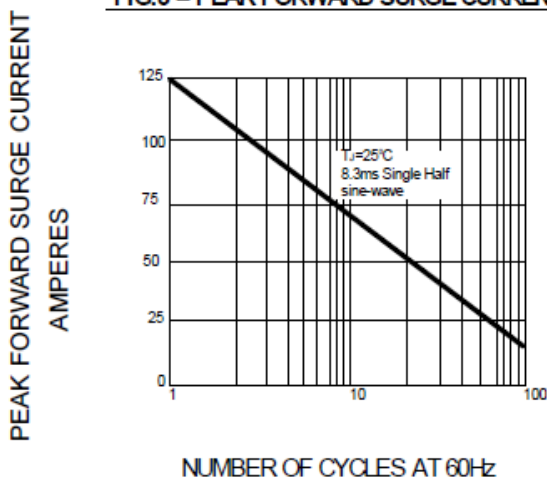
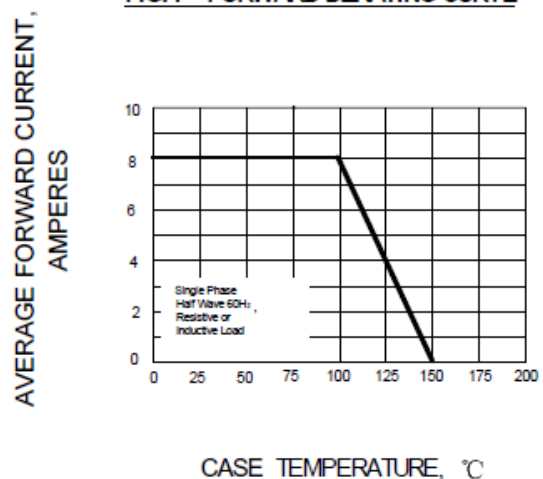


FIG.4 - FORWARD DERATING CURVE



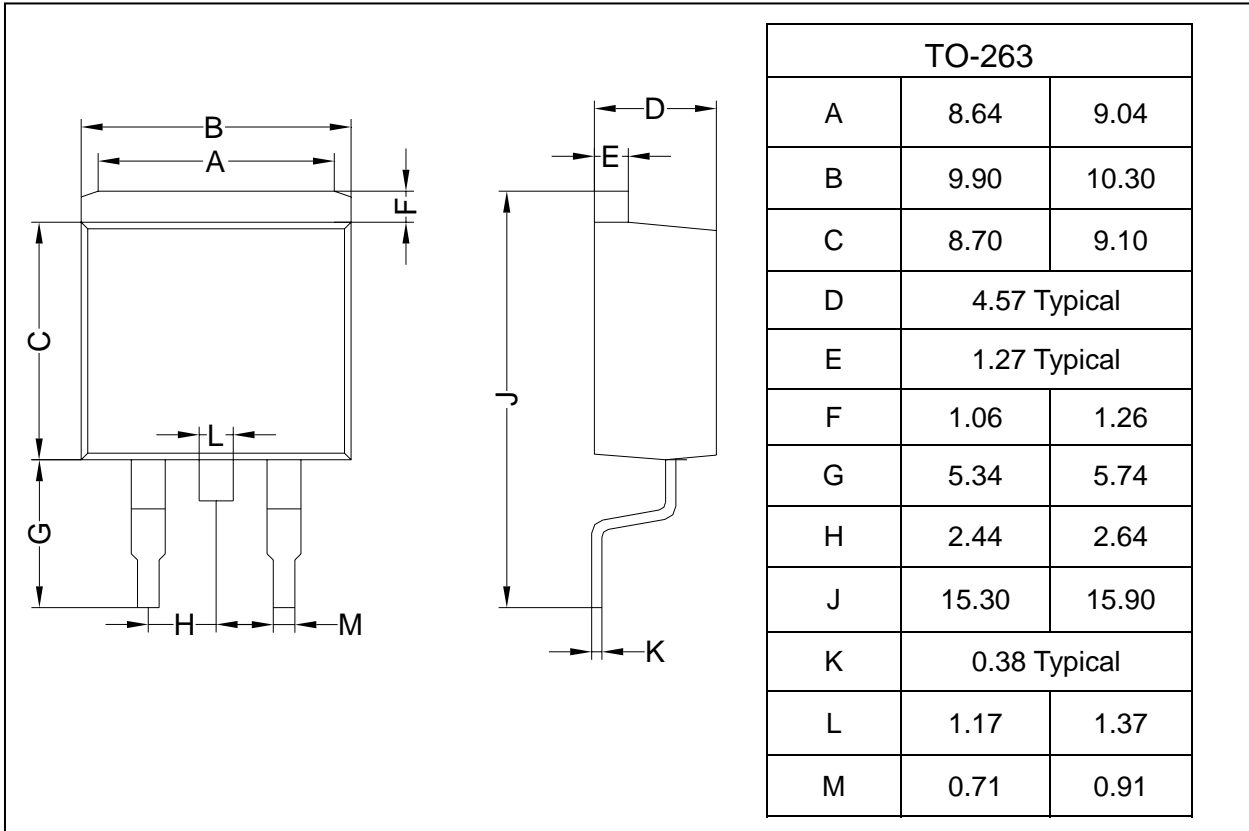
Super Fast Rectifiers

GF820B---GF860B

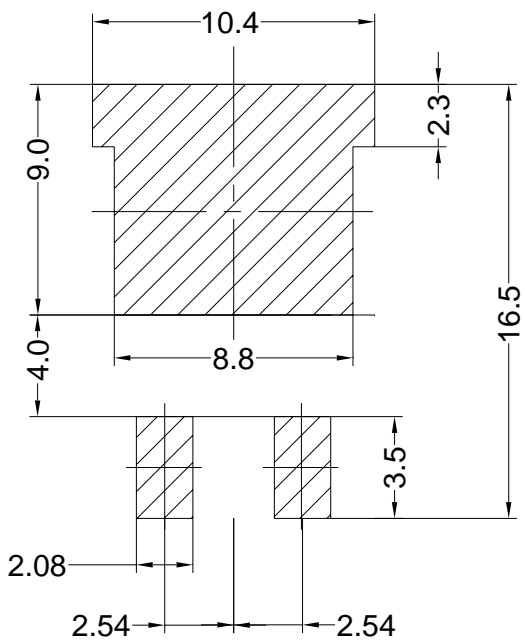
PACKAGE OUTLINE

Plastic surface mounted package

TO-263



SOLDERING FOOTPRINT



Unit:mm