



# GV804 SERIES

## SURFACE MOUNT RECTIFIER

**Voltage**

**400~1000 V**

**Current**

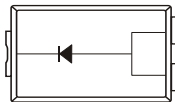
**8 A**

### Features

- For surface mounted applications in order to optimize board space
- Ultra thin profile package for space constrained utilization
- Easy pick and place package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### Mechanical Data

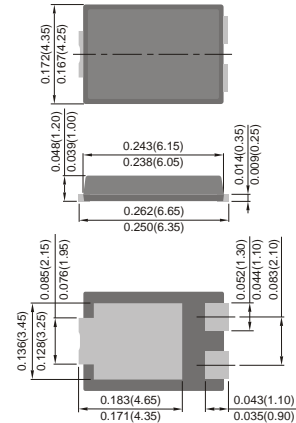
- Case: TO-277 package
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.0037 ounces, 0.1073 grams
- Marking: Part number



TOP VIEW

**TO-277**

Unit : inch(mm)



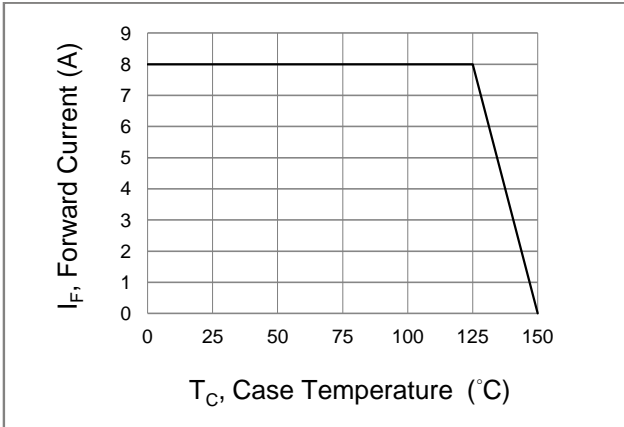
### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25<sup>o</sup>C unless otherwise noted)

PARAMETER	SYMBOL	GV804	GV806	GV808	GV810	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	400	600	800	1000	V
Maximum rms voltage	V <sub>RMS</sub>	280	420	560	700	V
Storage temperature range	V <sub>R</sub>	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	8				A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200				A
Maximum forward voltage at 8A	V <sub>F</sub>	1.1				V
Maximum dc reverse current at rated dc blocking voltage	I <sub>R</sub>	5				μA
Typical junction capacitance Measure at 1MHz and applied V <sub>R</sub> =4V	C <sub>J</sub>	55				pF
Typical thermal resistance	(Note 1) R <sub>θJC</sub>	3				°C/W
	(Note 2) R <sub>θJA</sub>	110				
Operating junction temperature range	T <sub>J</sub>	-55 to +150				°C
Storage temperature range	T <sub>STG</sub>	-55 to +150				°C

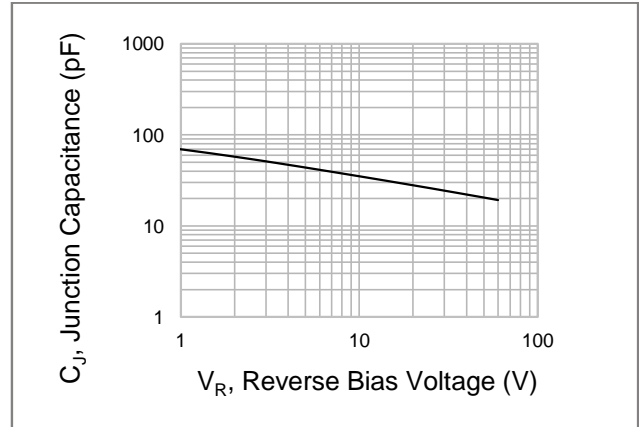
Note : 1. Mounted on a 10cm x 10cm x 0.5mm copper pad area.  
 2. Mounted on a FR4 PCB, single-sided copper, mini pad.



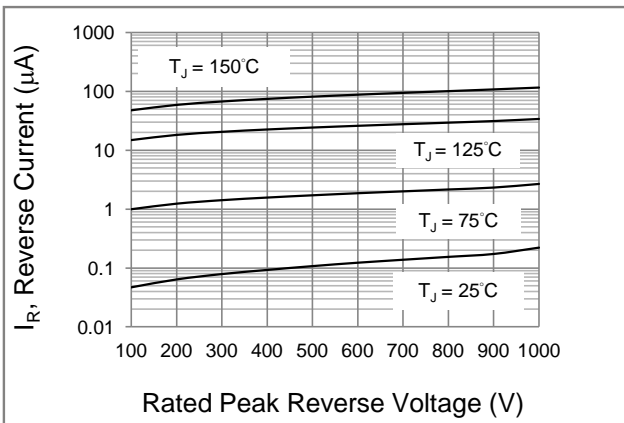
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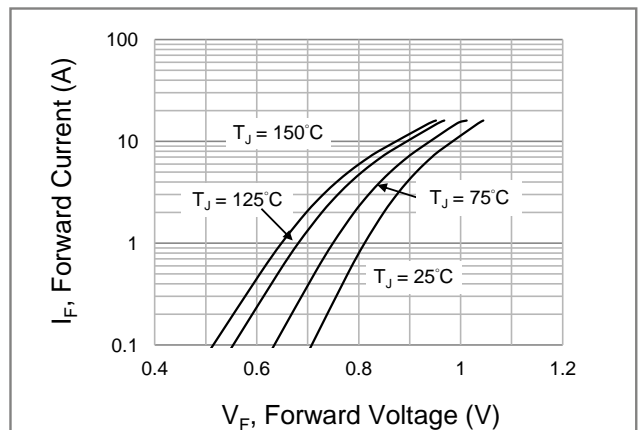
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

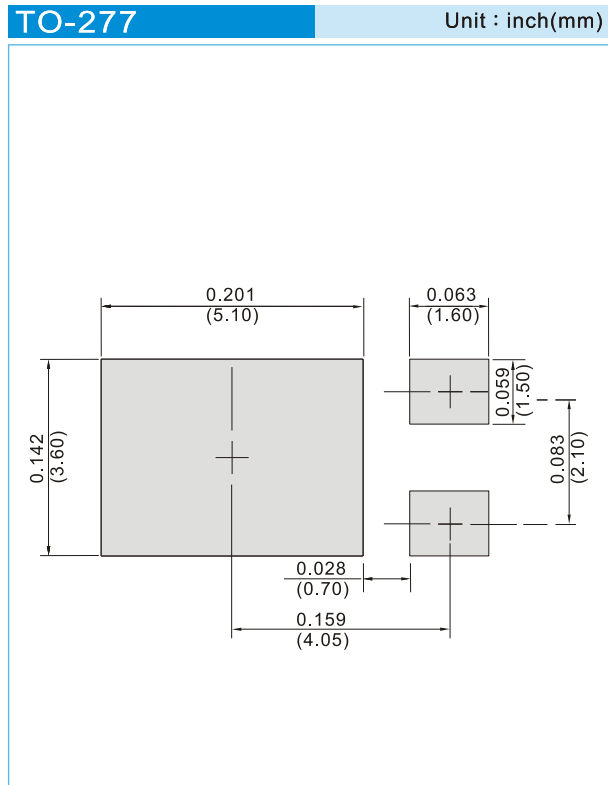


**Fig.4 Typical Forward Characteristics**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R – 5K per 13" plastic Reel



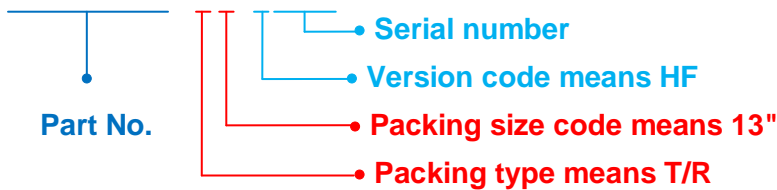
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Part No\_packing code\_Version

GV804\_R2\_00001

For example :

RB500V-40\_R2\_00001



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> -5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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