



# 1N4148GW6

## SURFACE MOUNT SWITCHING DIODES

**Voltage**

**100 V**

**Power**

**410 mW**

**SOT-23 6L**

Unit : inch(mm)

### Features

- Fast switching Speed.
- Electrically identical to standard JEDEC
- High Conductance
- Surface mount package ideally suited for automatic insertion.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std.  
(Halogen Free)

### Mechanical Data

- Case: SOT-23 6L plastic case
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0005 ounces, 0.014 grams
- Marking: DA2

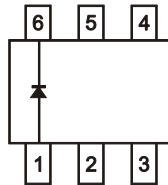
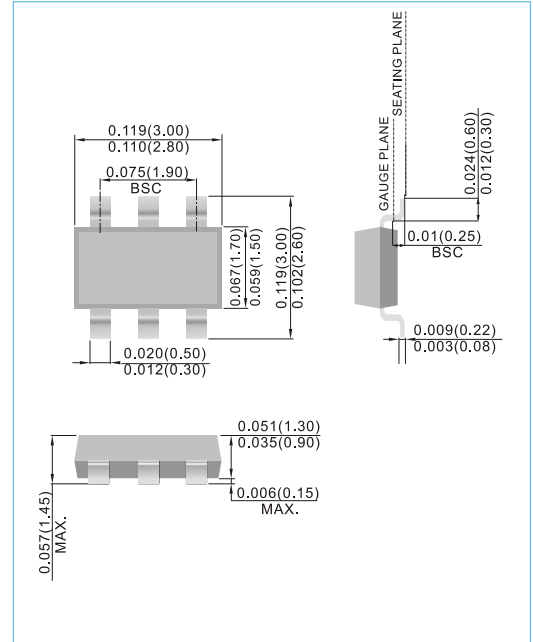


Fig.215(TOP VIEW)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Reverse Voltage	V <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
RMS Voltage	V <sub>RMS</sub>	50	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	75	V
Maximum Average Forward Current at T <sub>A</sub> =25°C	I <sub>AV</sub>	150	mA
Peak Forward Surge Current, 1μs	I <sub>FSM</sub>	4	A
Power Dissipation Derate Above 25 °C	P <sub>TOT</sub>	410	mW
Maximum Forward Voltage	V <sub>F</sub>	0.715@0.001A 0.855@0.01A 1@0.05A 1.25@0.15A	V



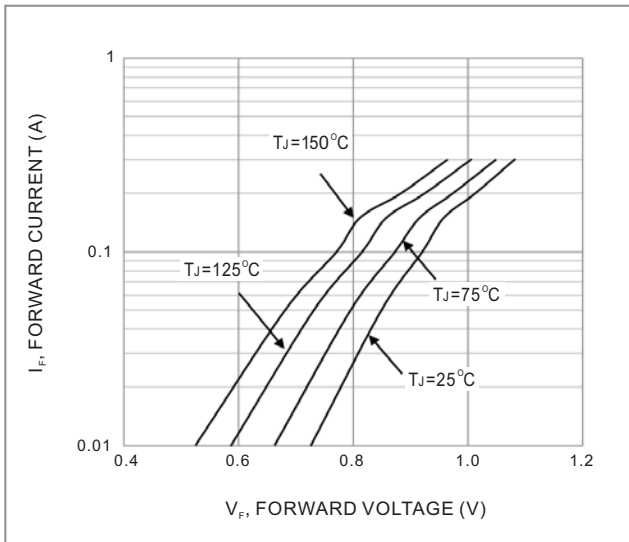
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## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

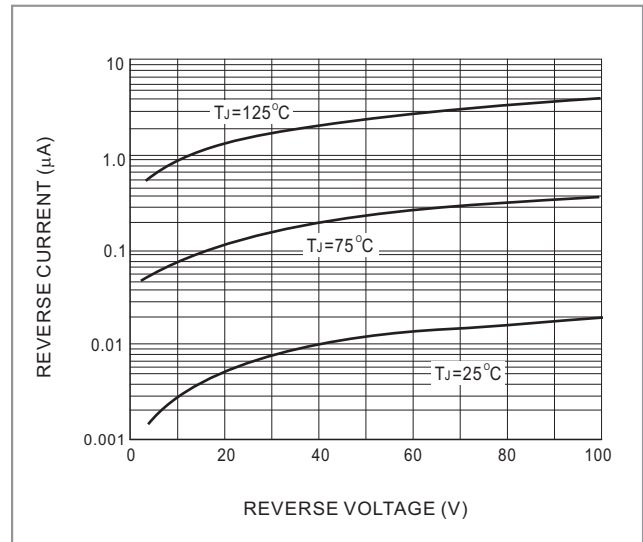
PARAMETER	SYMBOL	VALUE	UNIT
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> =25°C	I <sub>R</sub>	0.025@20V 2.5@75V	μA
Junction Capacitance (Note 1)	C <sub>J</sub>	1.5	pF
Maximum Reverse Recovery Time (Note 2)	T <sub>RR</sub>	4	ns
Typical Thermal Resistance	R <sub>θJA</sub>	450	°C/W
Operating and Storage Temperature Range	T <sub>J</sub>	-55 to +150	°C

Note:1.C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ

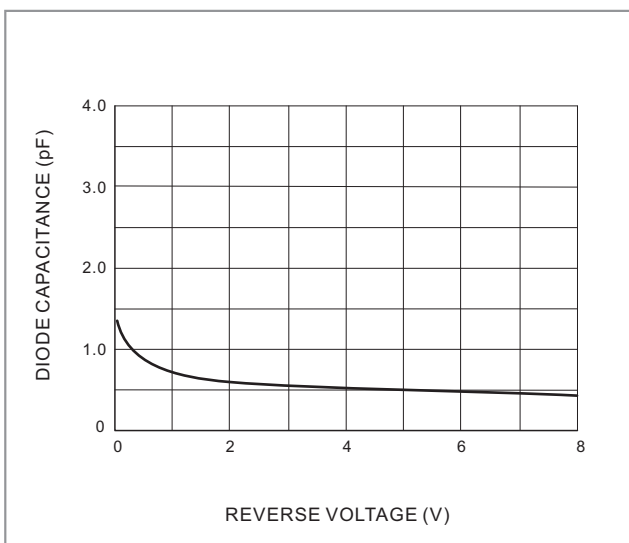
2.From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6V, R<sub>L</sub>=100Ω



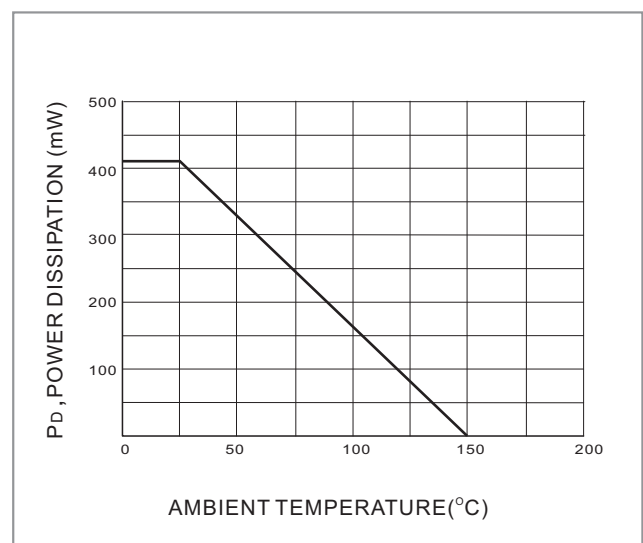
**Fig. 1 TYPICAL FORWARD CHARACTERISTICS**



**Fig. 2 TYPICAL REVERSE CHARACTERISTICS**



**Fig. 3 TYPICAL JUNCTION CAPACITANCE**

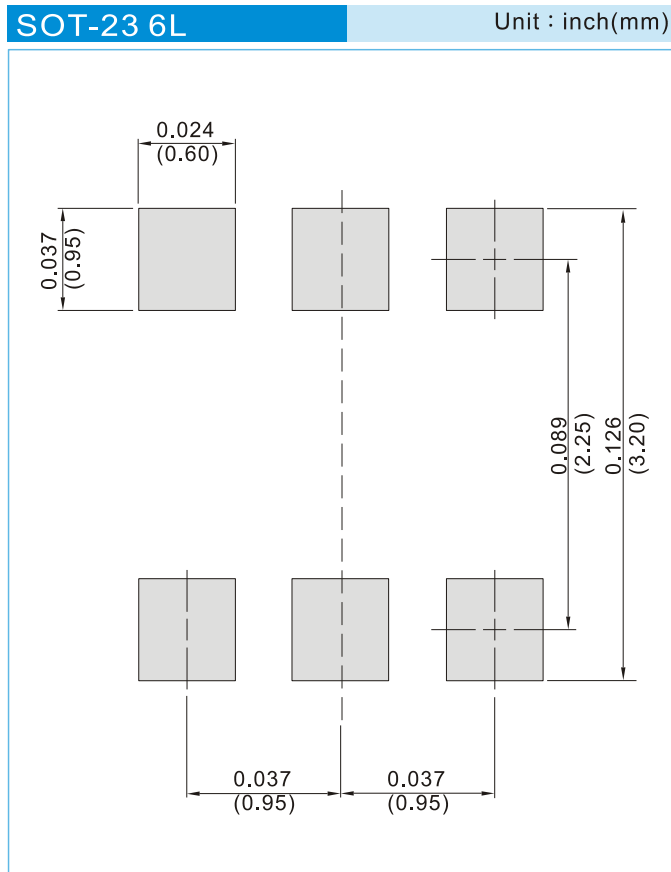


**Fig. 4 POWER DERATING CURVE**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R – 10K per 13" plastic Reel  
T/R – 3K per 7" plastic Reel



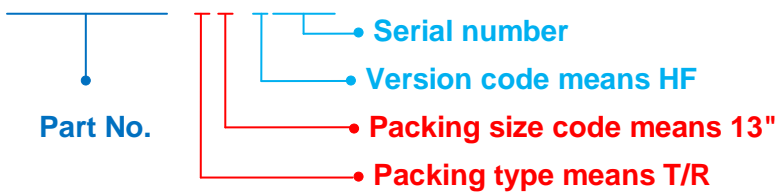
# 1N4148GW6

**Part No\_packing code\_Version**

- 1N4148GW6\_R1\_00001
- 1N4148GW6\_R2\_00001
- 1N4148GW6\_S1\_00001
- 1N4148GW6\_S2\_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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