



# 1SS387FN2

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 80 Volts    **POWER** 200mWatts

### FEATURES

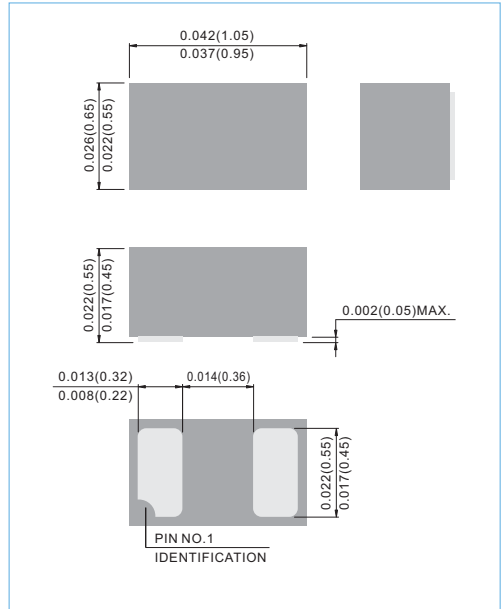
- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case : DFN 2L plastic case.
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.00004 ounces, 0.0011grams
- Marking Code : BZ
- Polarity : Color band cathode



**DFN 2L**    Unit : inch(mm)



### ABSOLUTE RATINGS (T<sub>A</sub> =25°C , unless otherwise noted)

PARAMETER	SYMBOL	1SS387FN2	UNITS
Reverse Voltage	V <sub>R</sub>	80	V
Peak Reverse Voltage	V <sub>RRM</sub>	85	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	80	V
Maximum Average Forward Current at T <sub>A</sub> =25 °C	I <sub>F(AV)</sub>	150	mA
Peak Forward Surge Current, @ 8.33ms AC Half Wave @ 10ms AC Half Wave	I <sub>FSM</sub>	2.5 2.3	A
Power Dissipation Derate Above 25 °C	P <sub>D</sub>	300	mW
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

### THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	1SS387FN2	UNITS
Typical Thermal Resistance	R <sub>θJA</sub>	400	°C / W



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## ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ , unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TPY	MAX	UNITS
Maximum Forward Voltage	$V_F$	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=100\text{mA}$	-	0.62 0.75 0.98	0.715 0.855 1.2	V
Reverse Leakage Current	$I_R$	$V_R=30\text{V}$ $V_R=80\text{V}$	-		0.1 0.5	$\mu\text{A}$
Maximum Total Capacitance	$C_T$	$V_R=0\text{V}$ , $f=1\text{MHz}$	-	0.5		pF
Maximum Reverse Recovery Time	$t_{rr}$	$I_F=10\text{mA}$ , $I_R=1\text{mA}$ $V_R=6\text{V}$ , $R_L=100\Omega$	-	1.6		ns

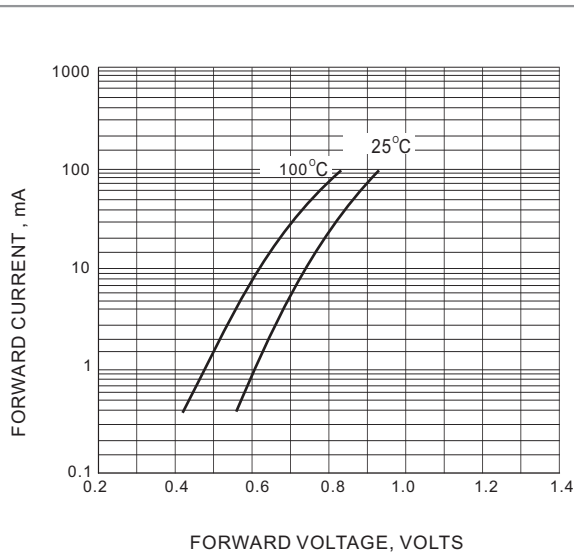


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

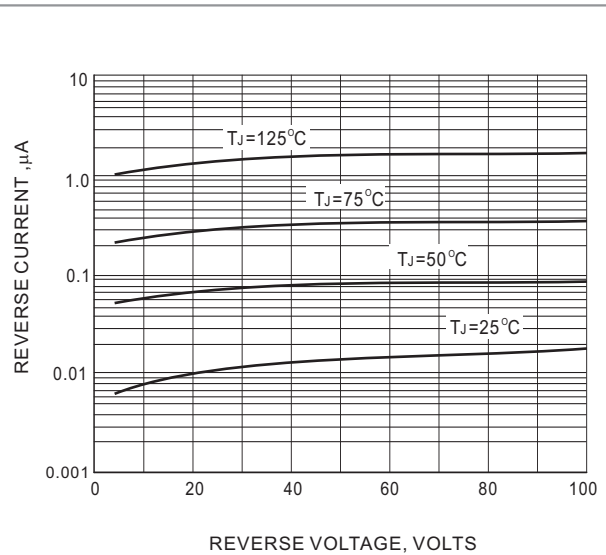


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

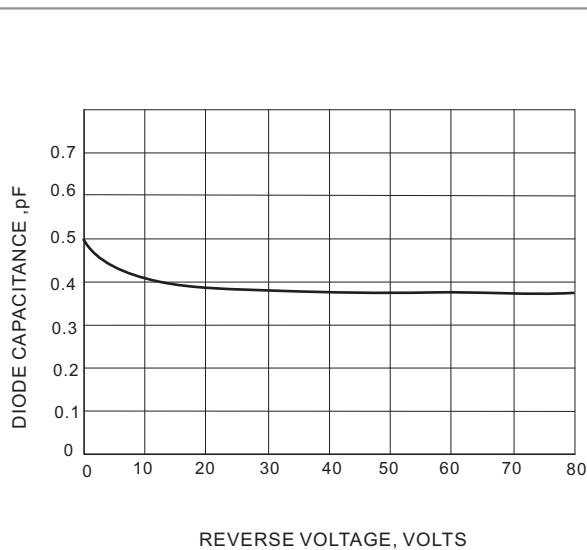


FIG. 3 TYPICAL JUNCTION CAPACITANCE

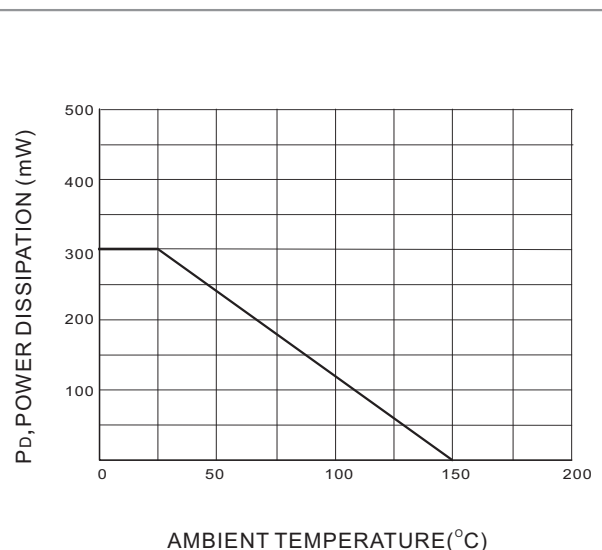
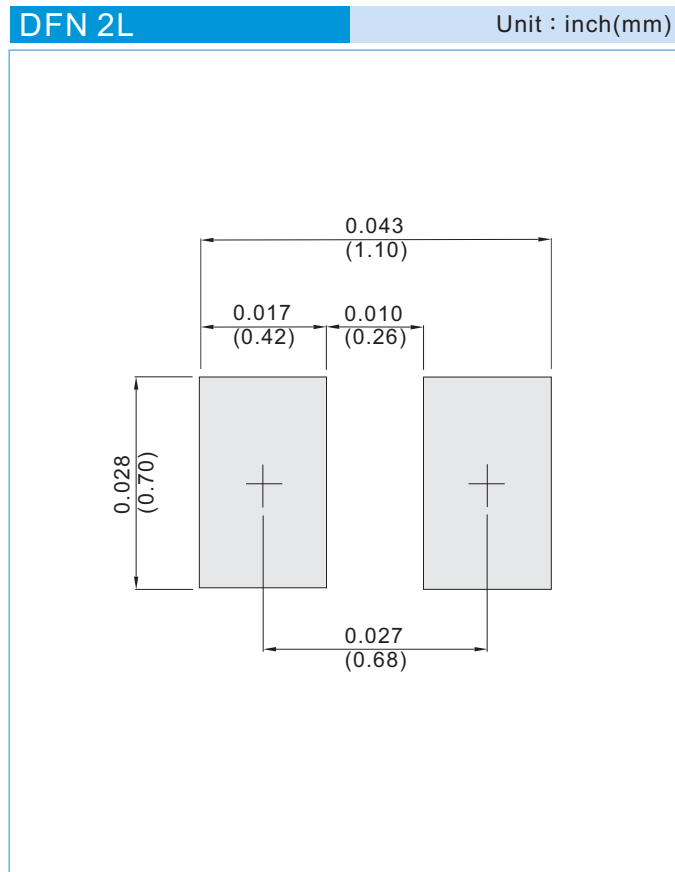


FIG. 4 POWER DERATING CURVE



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R - 8K per 7" plastic Reel

## LEGAL STATEMENT

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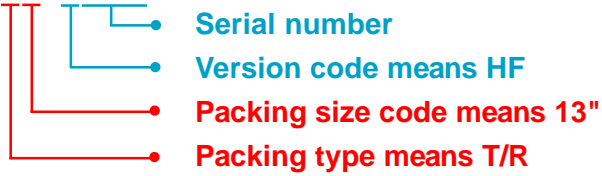


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For example :

RB500V-40\_R2\_00001

Part No.



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
T/B	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
T/R	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
B/P	<b>B</b>	13"	<b>2</b>			
T/P	<b>T</b>	26mm	<b>X</b>			
TRR	<b>S</b>	52mm	<b>Y</b>			
TRL	<b>L</b>	PBCU	<b>U</b>			
FORMING	<b>F</b>	PBCD	<b>D</b>			

Part No\_packing code\_Version

1SS387FN2\_R1\_00001