



1SS226

SURFACE MOUNT SWITCHING DIODE

VOLTAGE	80 Volts	Power	150 mW
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SOT-23 Unit : inch(mm)

FEATURES

- Ultra high speed
- Low Forward Voltage
- Small total capacitance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case : SOT-23, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Weight : 0.0003 ounces, 0.0084 grams

Polarity:Color band denotes cathode end

Marking : A7

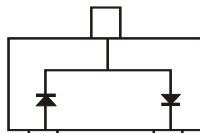
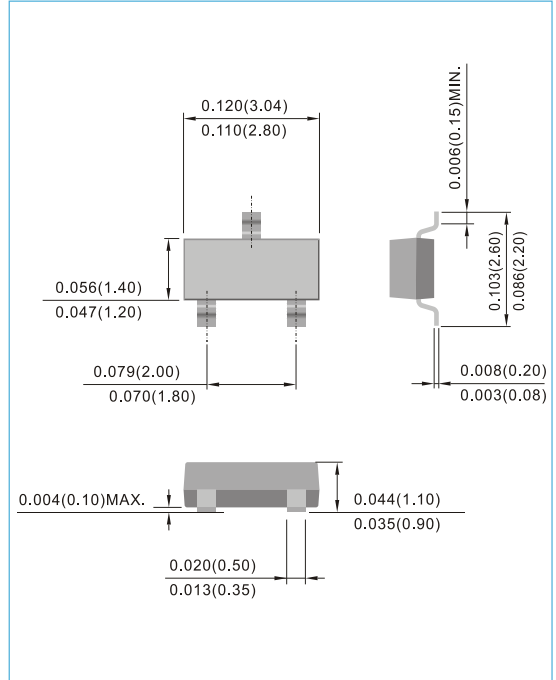


Fig. 17(TOP VIEW)



MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	80	V
Maximum RMS Voltage	V_{RMS}	56	V
Maximum DC Blocking Voltage	V_R	80	V
Average Rectified Output Current	$I_{F(AV)}$	100	mA
Peak forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	2	A
Maximum Power Dissipation	P_D	150	mW
Typical Thermal Resistance, Junction to Case (Notes 1)	$R_{\theta JC}$	220	$^{\circ}\text{C/W}$
Operating Junction Temperature and Storage Temperature range	T_J, T_{STG}	-55 to + 125	$^{\circ}\text{C}$

Notes :

1. Mounted on an FR4 PCB, single-sided copper, with 48cm² copper pad area.



1SS226

ELECTRICAL CHARACTERISTICS (T_A=25 C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =100μA T _A =25°C	80	-	-	V
Instantaneous forward voltage	V _F	I _F =1mA T _A =25°C	-	0.60	-	V
		I _F =10mA T _A =25°C	-	0.71	-	V
		I _F =100mA T _A =25°C	-	0.92	1.2	V
		I _F =1mA T _A =125°C	-	0.40	-	V
		I _F =10mA T _A =125°C	-	0.55	-	V
		I _F =100mA T _A =125°C	-	0.79	-	V
Reverse current	I _R	V _R =30V T _A =25°C	-	-	0.1	μA
		V _R =80V T _A =25°C	-	-	0.5	μA
Total capacitance	C _J	V _R =0V, f=1MHz	-	0.9	3.0	pF

RATING AND CHARACTERISTIC CURVES

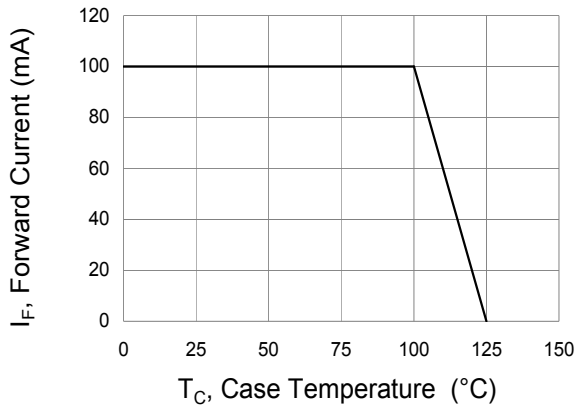


Fig.1 Forward Current Derating Curve

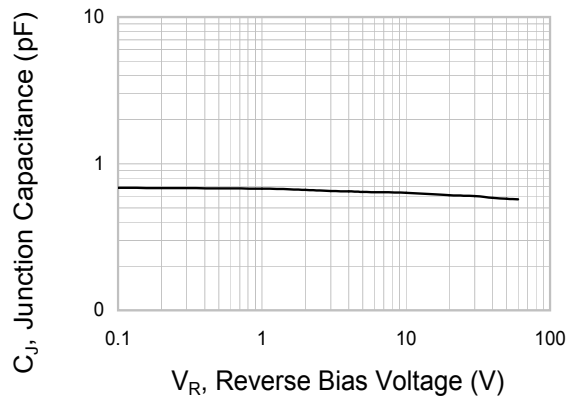


Fig.2 Typical Junction Capacitance

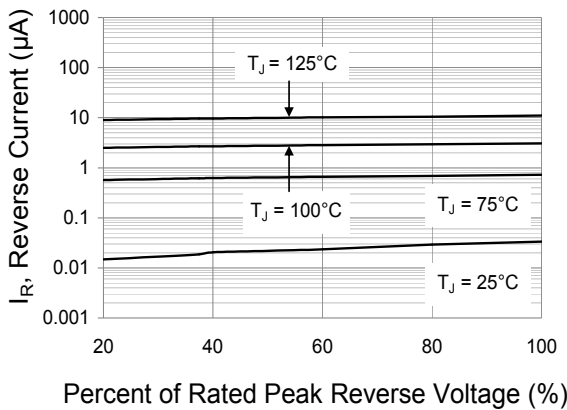


Fig.3 Typical Reverse Characteristics

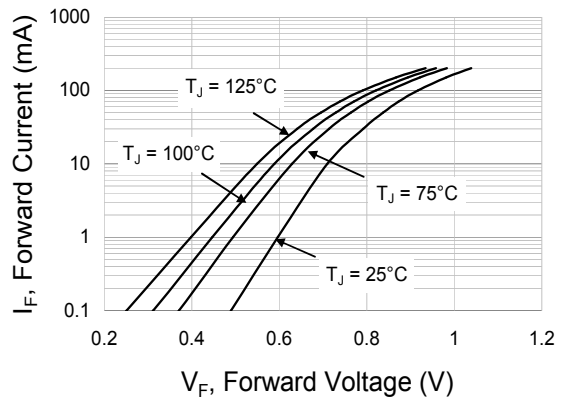
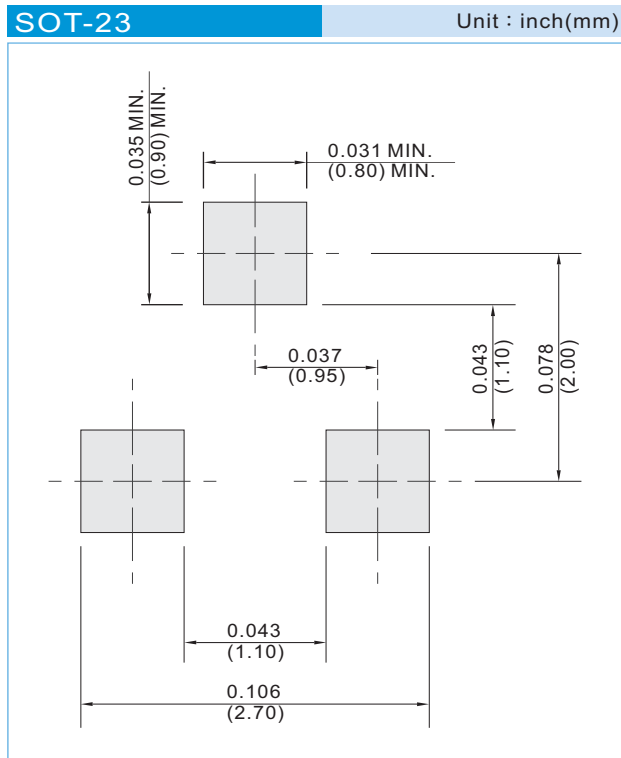


Fig.4 Typical Forward Characteristics



1SS226

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



1SS226

Part No_packing code_Version

FÙÙGĜĜ _R1_00001

FÙÙGĜĜ _R2_00001

For example :

RB500V-40 **R2** **00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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			



1SS226

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