Lastinght

DSS22 THRU DSS210

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 2.0 Ampere

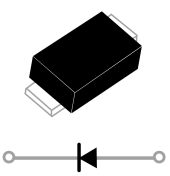
Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds,0.375”(9.5mm) lead length, 5lbs.(2.3kg)tension

Mechanical Data

- Case:SOD-123FL molded plastic body
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0007 ounce, 0.02 grams

SOD-123FL



RoHS COMPLIANT

Pb-Free

Specification

Maximum Rating And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	DSS22	DSS23	DSS24	DSS25	DSS26	DSS27	DSS28	DSS29	DSS210	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	V
Maximum average forward rectified current	$I_{(AV)}$	2.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	40.0									A
Maximum instantaneous forward voltage at 2.0A	V_F	0.55			0.70		0.85				V
Maximum DC reverse current T_A=25℃	I_R	0.5					0.1				mA
at rated DC blocking voltage T_A=100℃		10.0					5.0				
Typical junction capacitance (NOTE 1)	C_J	220			180						pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	95									°C/W
Operating junction temperature range	T_J	-55 to +125			-55 to +150						°C
Storage temperature range	T_{STG}	-55 to +150									°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.PCB mounted on 0.2*0.2" (5.0*5.0mm) coppeer pad area.

Ratings and characteristic curves DSS22 thru DSS210

FIG. 1- FORWARD CURRENT DERATING CURVE

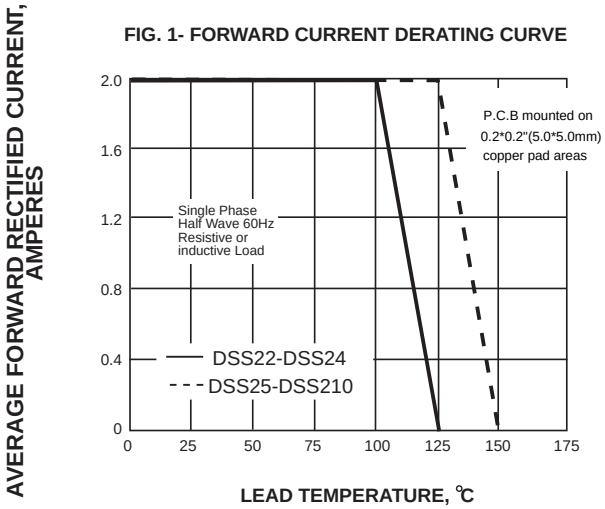


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

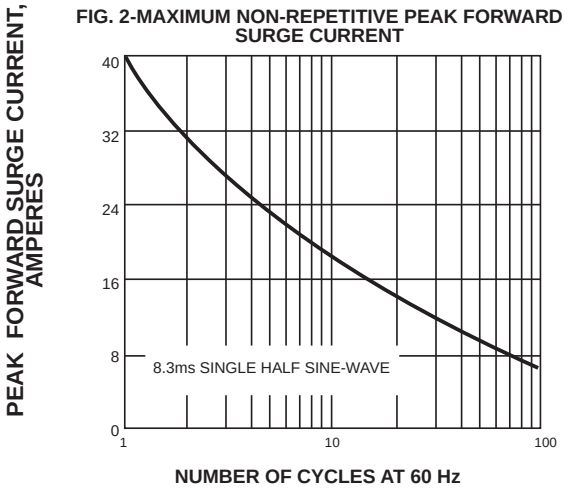


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

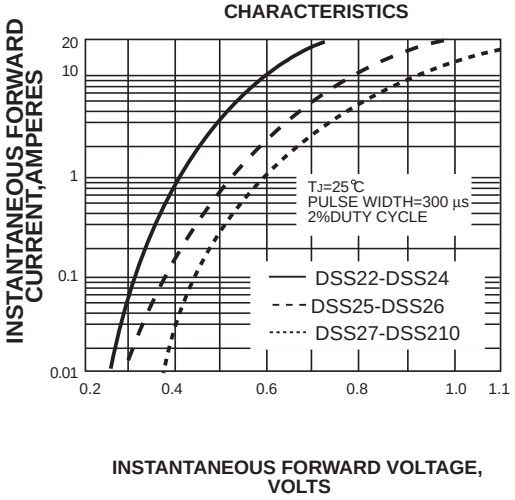


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

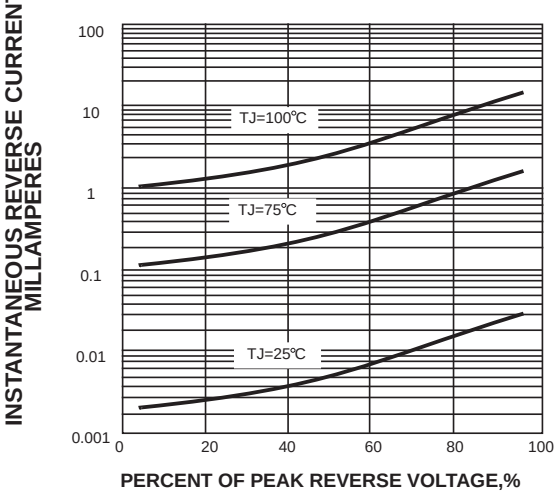
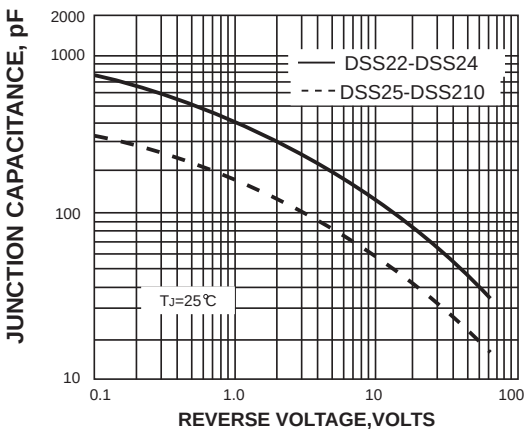


FIG. 5-TYPICAL JUNCTION CAPACITANCE

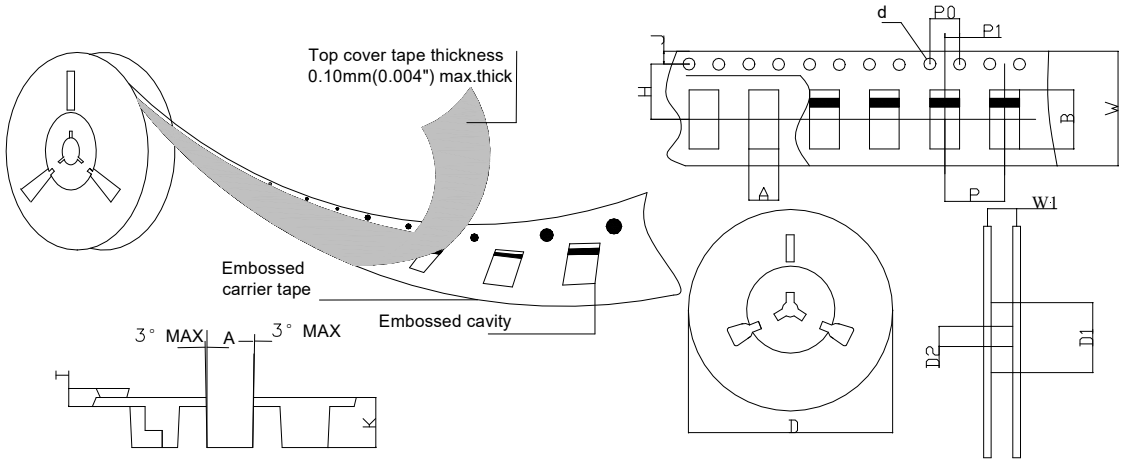


Marking and packging illustration

1、Marking

SYMBOL	Explanation
A	Product Name

2、Packaging



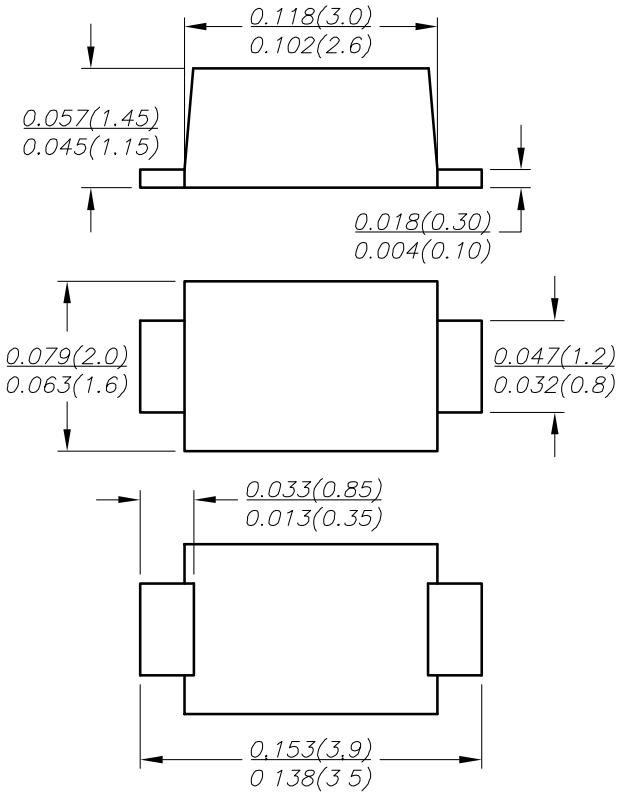
SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	SOD-123FL	ITEM	SYM BOL	SOD-123FL
Carrier width	A	2.1(0.083)Max	Carrier depth	K	1.60(0.063)Typ
Carrier length	B	4.0(0.157)Max	Punch hole pitch	P	4.00(0.157)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	177.8(7)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.25(0.098)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	8.15(0.321)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	10.5(0.413)Min
Punch hole position	H	3.50(0.138)Typ			

3、Ordering Information

Part Number	Compliance	Case	Packaging
SSXX	Standard	SOD-123FL	3000/Tape & Reel

Dimension

SOD-123FL



Dimensions in inches and (millimeters)

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