

SOD-123F

Primary Characteristics

I_F	3	A
V_{RRM}	200	V
I_{FSM}	80	A
V_F	0.92	V
T_J max	150	°C

Features

- Low power loss
- High efficiency
- For Surface Mount Application
- High Current Capability

Mechanical Data

- Case : SOD-123F
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Plated leads solderable per MIL-STD-750, Method 2026
- Polarity : Cathode Band
- Mounting position : Any

Ordering Information

Part No.	Remark	Package	Packing
ERS3200P	General	SOD-123F	3000 / Tape & Reel
ERS3200P-H	Halogen Free		
ERS3200P-Q	AEC-Q101 qualified		

Maximum Ratings (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	ERS3200P	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC blocking voltage	V_{DC}	200	V
Maximum average forward rectified current @TL=90°C	I_F	3	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80	A
Maximum Instantaneous Forward Voltage IF=3A @ 25°C	V_F	0.92	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I_R	0.05 5	mA
Operating Temperature Range	T_J	-50 ~ 150	°C
Storage Temperature Range	T_{STG}	-50 ~ 150	°C
Marking Code		VC	



Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

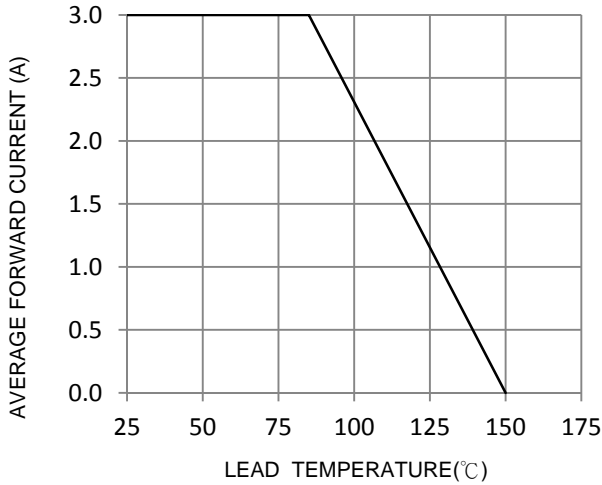


FIG. 2-Maximum Non-Repetitive Forward Surge Current

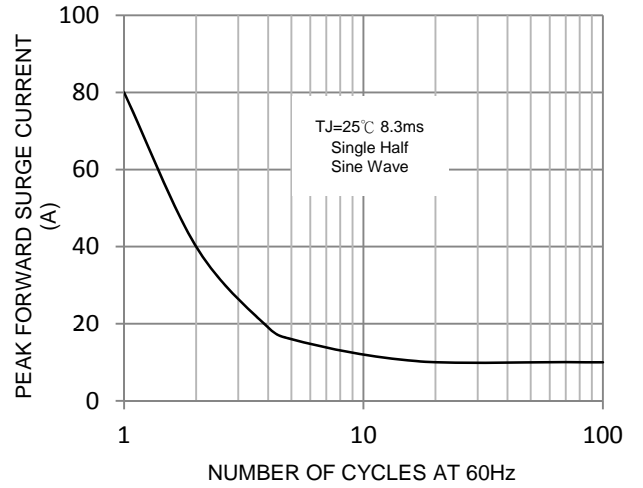


FIG. 3-Typical Forward Characteristics

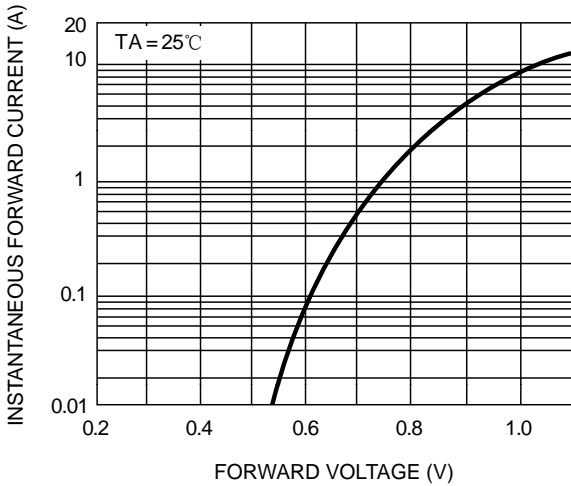
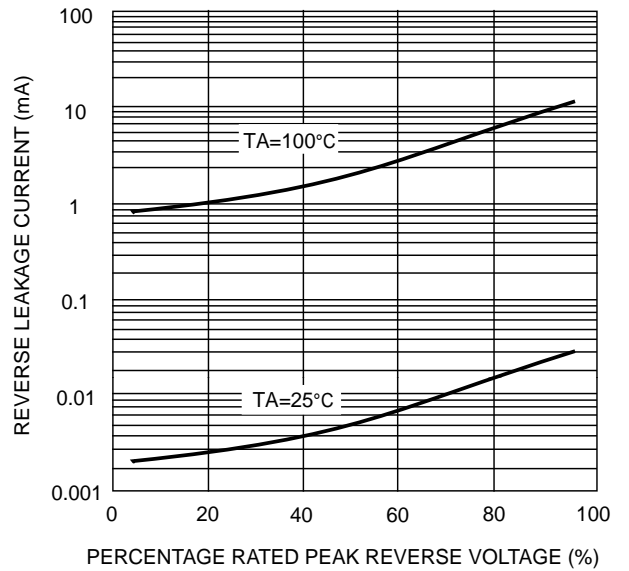
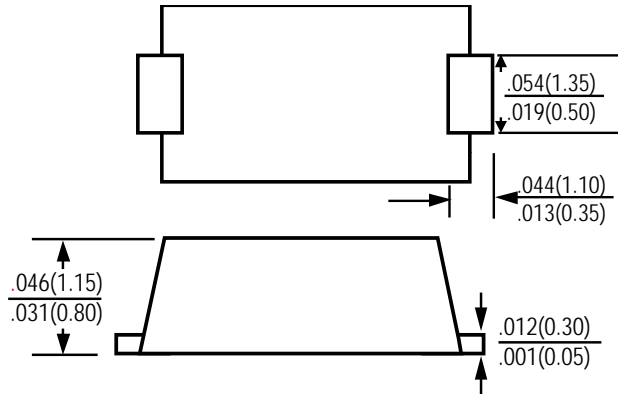
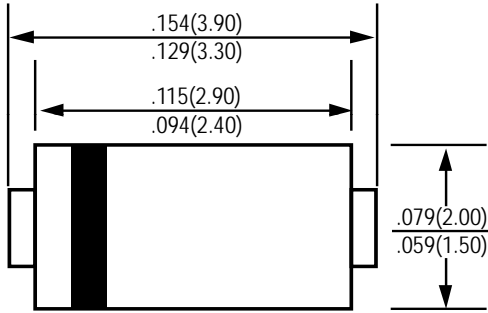


FIG. 4-Typical Reverse Characteristics





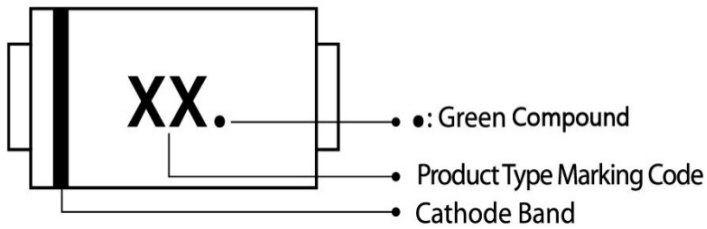
Package Outline Dimensions



SOD-123F

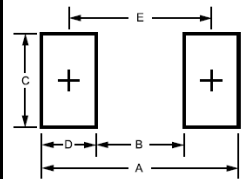
Dimensions in inches and (millimeters)

Marking Information



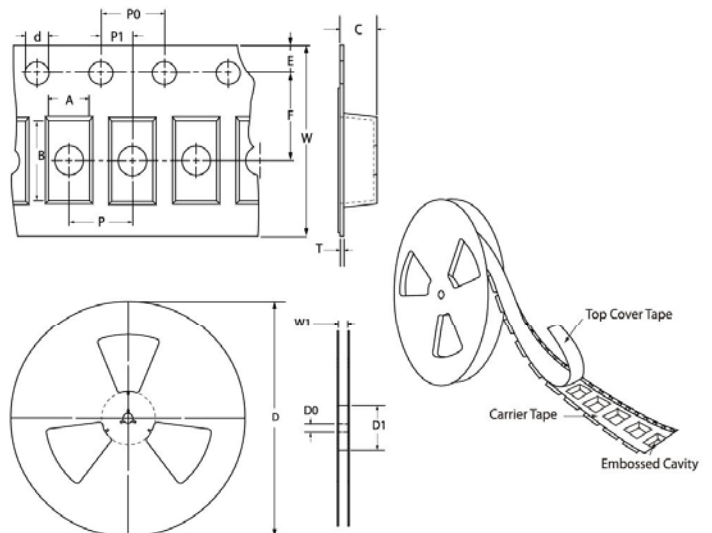
Suggested Pad Layout

Outline Dimension	SOD-123F (mm)
A	4.25
B	1.52
C	1.80
D	1.34
E	2.86



Tap & Reel Specification

ITEM	SYMBOL	SOD-123F (mm)
Carrier width	A	2.05±0.1
Carrier length	B	4.01±0.1
Carrier depth	C	1.32±0.1
Sprocket hole	d	2.00±0.1
Reel outside diameter	D	178(max)
Reel inner diameter	D1	50(min)
Feed Hole diameter	D0	13.3±0.1
Sprocket hole position	E	1.75±0.1
Punch hole position	F	3.5±0.1
Punch hole pitch	P	4.0±0.1
Sprocket hole pitch	P0	4.0±0.1
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.24±0.03
Tape width	W	8.0±0.03
Reel width	W1	9.3±1





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