

SOD-123F

Extremely Low Thermal Resistance

For Surface Mount Application

Features

High Current Capability

Low Forward Voltage

RoHS Compliant Product



Excellent Schottky Barrier Rectifiers

Primary Characteristics			
١ _F	2	А	
V _{RRM}	40	V	
I _{FSM}	20	Α	
V _F	0.5	V	
T _J max	125	°C	

Mechanical Data

- Case : SOD-123F
- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Lead free Plating (Tin Finish) Solderable per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Weight : 0.022 grams (approximate)

Ordering Information				
Part No.	Remark	Package	Packing	
EBRT2L40P	RoHS Compliant			
EBRT2L40P-H	Halogen Free SOD-123F		3000 / Tape & Reel	
EBRT2L40P-Q	AEC-Q101 qualified			

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

Parameter	Symbol	EBRT2L40P	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	V
Maximum RMS Voltage	V _{RMS}	28	V
Maximum DC Blocking Voltage	V _{DC}	40	V
Maximum Average Forward Rectified Current	I _F	2.0	А
Peak Forward Surge Current 8.3ms Single Half Sine- Wave Superimposed on Rated Load	I _{FSM}	20.0	А
Maximum Instantaneous Forward Voltage IF=2A @ 25°C	V _F	0.5	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I _R	0.2 10	mA
Typical Junction Capacitance (NOTE1)	CJ	150	pF
Typical Thermal Resistance	R _{eJC}	30	°C/W
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C
Marking Code		L4	
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NOTES :

1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC



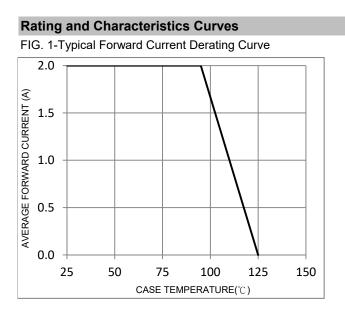


FIG. 3-Maximum Non-Repetitive Forward Surge Current

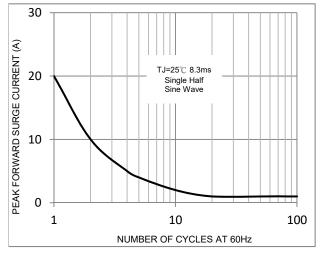
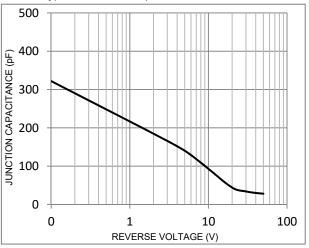


FIG. 5-Typical Junction Capacitance



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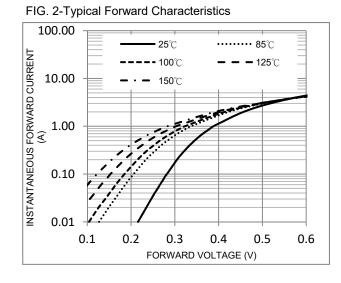
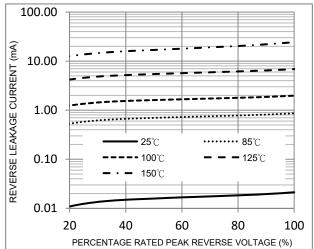


FIG. 4-Typical Reverse Characteristics

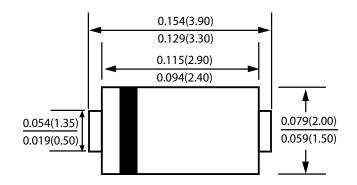


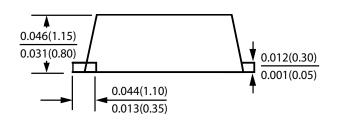




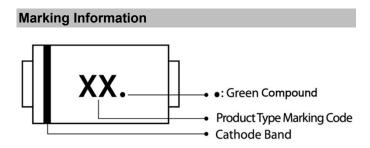
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Package Outline Dimensions



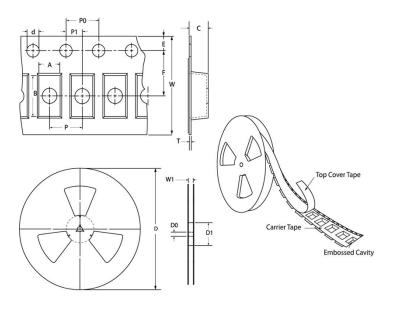


SOD-123F Dimensions in inches and (millimeters)



Suggested Pad Layout			
Outline	000-1201		
Dimension	(mm)	◄ = =►	
А	4.20		
В	1.52		
С	1.80		
D	1.34		
E	2.86	A	

Tap & Reel Specification				
Item	Symbol	SOD-123F		
nem	Symbol	(mm)		
Carrier width	А	2.00 ± 0.15		
Carrier length	В	3.98 ± 0.13		
Carrier depth	С	1.38 ± 0.17		
Sprocket hole	d	1.75 ± 0.35		
Reel outside diameter	D	180 (max)		
Reel inner diameter	D1	50 (min)		
Feed Hole diameter	D0	13.10 ± 0.6		
Sprocket hole position	E	1.75 ± 0.1		
Punch hole position	F	3.50 ± 0.1		
Punch hole pitch	Р	4.00 ± 0.1		
Sprocket hole pitch	P0	4.00 ± 0.1		
Embossment center	P1	2.00 ± 0.1		
Overall tape thickness	Т	0.28 (max)		
Tape width	W	8.00 ± 0.3		
Reel width	W1	10.0 ± 2		







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