

SCHOTTKY BARRIER DIODES

Reverse Voltage - 30 V

Forward Current – 0.2 A

FEATURES

- ◆Metal silicon junction, majority carrier conduction
- ◆Guarding for overvoltage protection
- ◆Low power loss, high efficiency
- ◆High current capability
- ◆low forward voltage drop
- ◆High surge capability
- ◆For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: SOD-323FL
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 4.5mg /0.00016oz

Pinning

1.Cathode	2.Anode
	
SOD-323FL	

Marking Code

BAT54WFL	L4
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Maximum Ratings And Electrical Characteristics

Ratings at 25 ° ambient temperature unless otherwise specified.

Parameter	Symbols	BAT54WFL	Units
Peak Repetitive Reverse Voltage	V_{RM}	30	V
Maximum Average Forward Current at Ta=25°C	I_o	0.2	A
Power dissipation	P_D	500	mW
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	13	A
Maximum Instantaneous Forward Voltage	V_F	0.32 @ $I_F=0.01A$ 1.0 @ $I_F=0.1A$	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	2.0 @ $V_R=25V$	uA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	635	°C/W
Storage and Operating Junction Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Fig.1 Forward Current Derating Curve

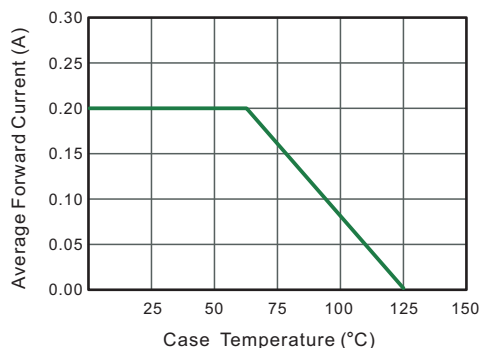


Fig.2 Typical Reverse Characteristics

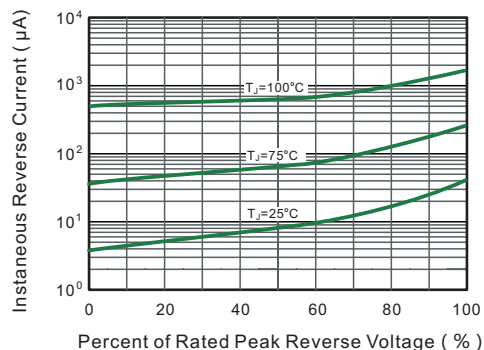


Fig.3 TYPICAL FORWARD VOLTAGE

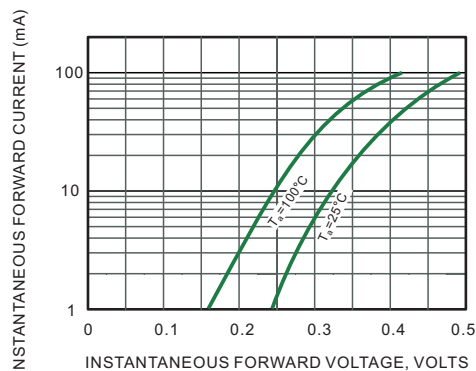


Fig.4 Typical Junction Capacitance

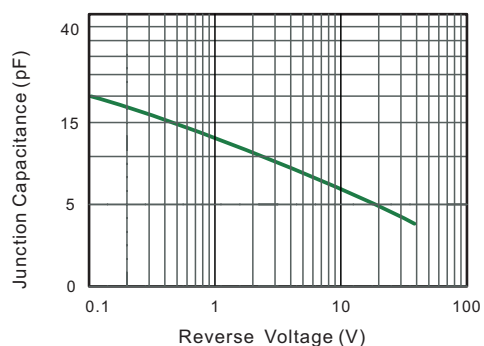


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

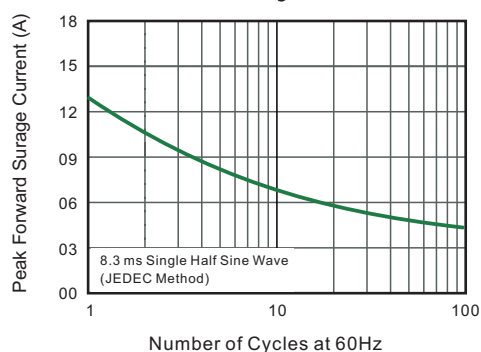
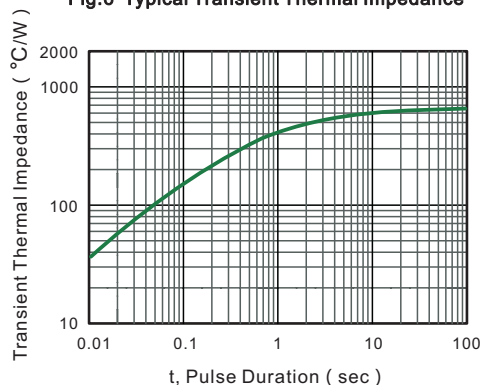


Fig.6 Typical Transient Thermal Impedance



Ordering information

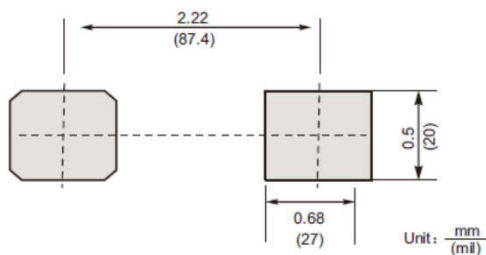
Package	Packing Description	Packing Quantity
SOD-323FL	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323FL

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.70	0.90	28	36
B	0.20	0.40	8	16
C	0.027	0.227	1	9
D	1.15	1.35	45	53
L	0.38	0.58	15	23
E	1.70	1.90	67	75
HE	2.30	2.70	91	67
∠	9°			

The recommended mounting pad size



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