



Schottky Barrier Diode



SOT-323

Features

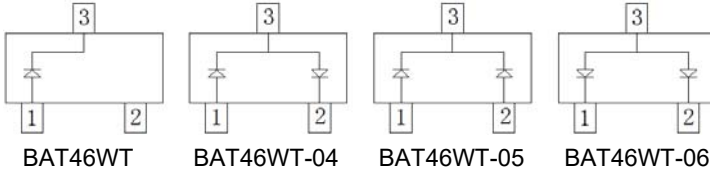
- Epoxy meets UL-94 V-0 flammability rating
- Meets MSL level 1, per J-STD-020C, LF max peak of 260 °C
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

Mechanical Data

- **Package:** SOT-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

Marking

BAT46WT	S91
BAT46WT-04	S92
BAT46WT-05	S93
BAT46WT-06	S94



■ Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V _{RRM}	V		100
Non-Repetitive Peak forward surge current	I _{FSM}	A	Non-Repetitive @ t = 8.3ms	0.75
Average forward current	I _{FAV}	mA		150
Power dissipation	P _D	mW		200
Thermal Resistance	R _{thJA}	°C/W		625
Maximum junction temperature	T _j	°C		125
Storage temperature range	T _{stg}	°C		-55 ~ +125

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT46WT	F2	Approximate 0.005	3000	30000	120000	7" reel
BAT46WT-04	F2	Approximate 0.005	3000	30000	120000	7" reel
BAT46WT-05	F2	Approximate 0.005	3000	30000	120000	7" reel
BAT46WT-06	F2	Approximate 0.005	3000	30000	120000	7" reel

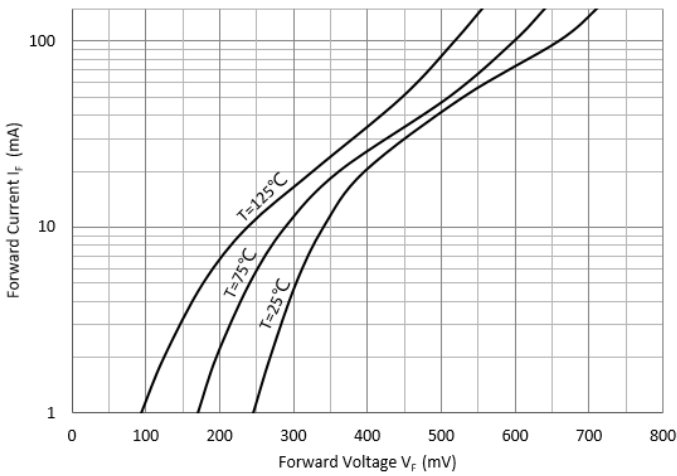


■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

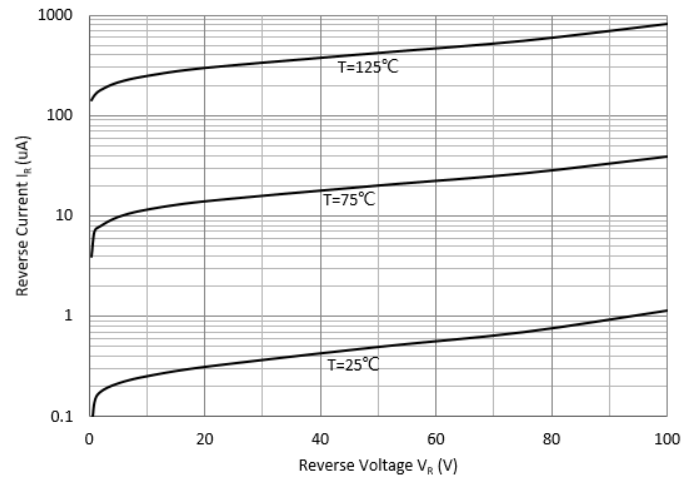
PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward voltage	V _F	V	I _F =0.1mA	0.25
		V	I _F =10mA	0.45
		V	I _F =250mA	1
Maximum Reverse current	I _R	uA	V _R =1.5V	0.3
		uA	V _R =10V	0.5
		uA	V _R =50V	1
		uA	V _R =75V	2
Minimum Breakdown voltage	V _R	V	I _R =100μA	100
Maximum Diode capacitance	C _D	pF	V _R =0V, f =1MHz	20
			V _R =1V, f =1MHz	12

■ Characteristics (Typical)

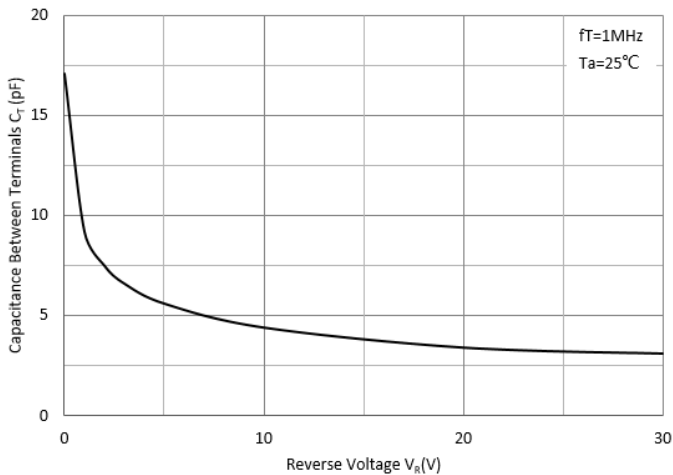
Forward Characteristics



Reverse Characteristics

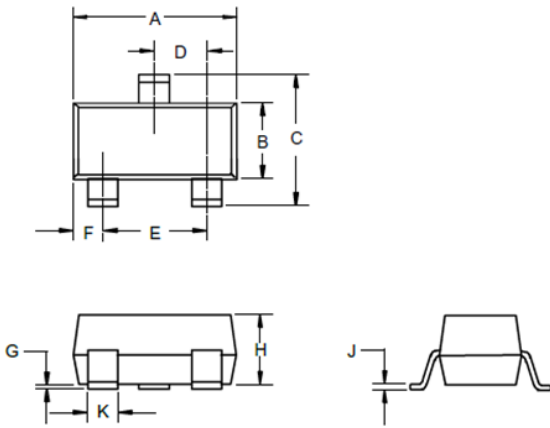


Capacitance Characteristics



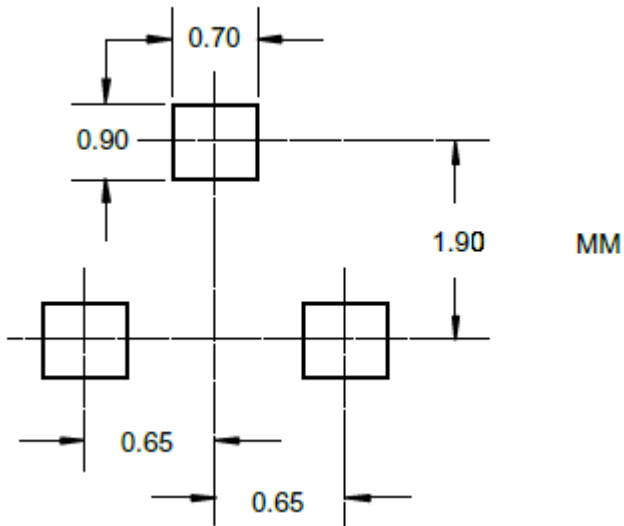


■ SOT-323 Package Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026Nominal		0.65Nominal		
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.039	0.90	1.00	
J	0.004	0.010	0.10	0.250	
K	0.006	0.016	0.15	0.40	

■ SOT-323 Soldering Footprint





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