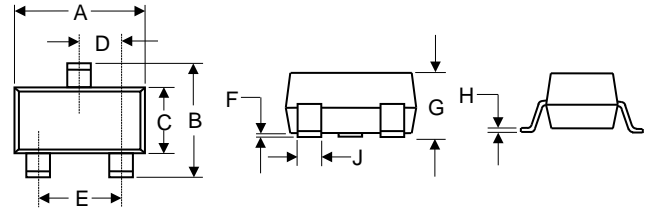
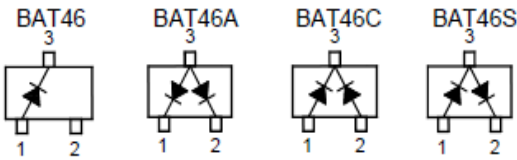


Features

- * High breakdown voltage
- * Low forward voltage
- * Surface mount device
- * BAT46 Marking Code: S46
- BAT46A Marking Code: A46
- BAT46C Marking Code: C46
- BAT46S Marking Code: B46



RoHS
COMPLIANT



SOT-23				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.110	0.120	2.80	3.04
B	0.087	0.102	2.20	2.60
C	0.047	0.055	1.20	1.40
D	0.035	0.04	0.89	1.02
E	0.070	0.080	1.78	2.04
F	---	0.004	---	0.10
G	0.035	0.047	0.89	1.20
H	0.003	0.008	0.08	0.19
J	0.015	0.02	0.37	0.51

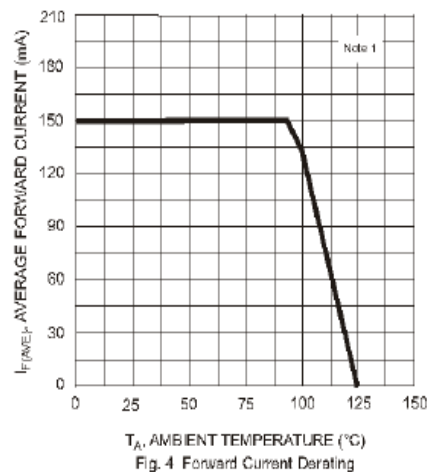
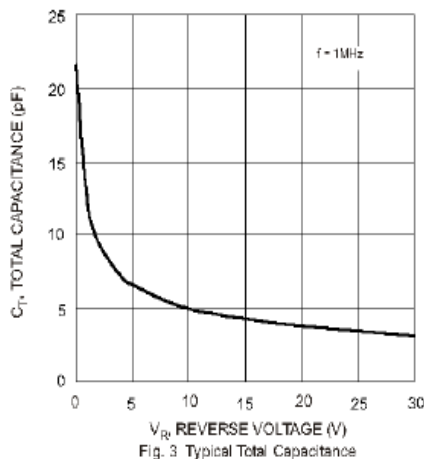
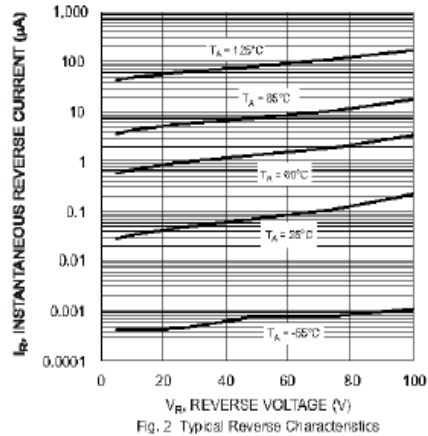
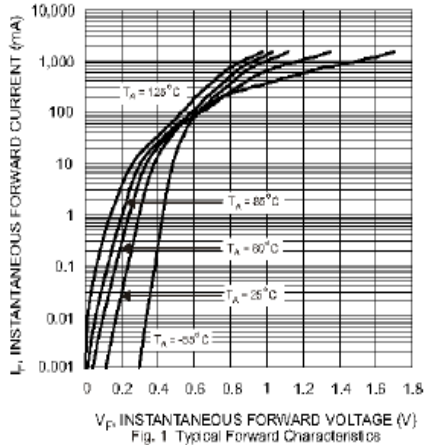
Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Continuous Forward Current	I _{F(AV)}	150	mA
Repetitive Peak Forward Current (at t _p < 1 s)	I _{FRM}	350	mA
Surge Forward Current (at t _p < 10 ms)	I _{FSM}	750	mA
Operating Temperature Range	T _j	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

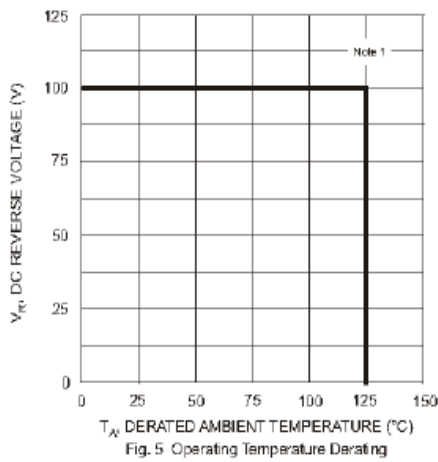
Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at I _R = 100 μA	V _{(BR)R}	100	-	-	V
Forward Voltage at I _F = 0.1 mA	V _F	-	-	0.25	V
at I _F = 10 mA		-	-	0.45	
at I _F = 250 mA		-	-	1	
Reverse Current at V _R = 1.5 V	I _R	-	-	0.5	μA
at V _R = 10 V		-	-	0.8	
at V _R = 50 V		-	-	2	
at V _R = 75 V		-	-	5	
at V _R = 1.5 V, T _j = 60 °C		-	-	5	
at V _R = 10 V, T _j = 60 °C		-	-	7.5	
at V _R = 50 V, T _j = 60 °C		-	-	15	
at V _R = 75 V, T _j = 60 °C		-	-	20	
Total Capacitance at V _R = 0 V, f = 1 MHz	C _{tot}	-	20	-	pF
at V _R = 1 V, f = 1 MHz		-	12	-	

Ratings and Characteristic Curves



Ratings and Characteristic Curves



Note 1: Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/sp02001.pdf>.

Ordering Information

Part No.	Package	Packing Code	Packing
BAT46 / A / C / S	SOT-23	R30	3000pcs/Reel

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