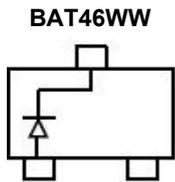
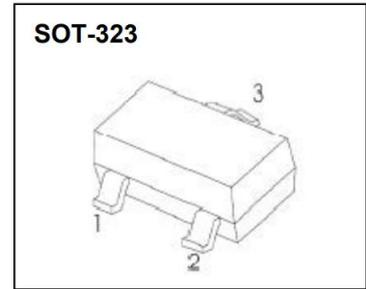


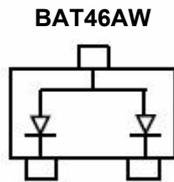


FEATURES

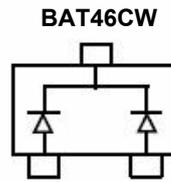
- High breakdown voltage
- Low forward voltage
- Surface mount device



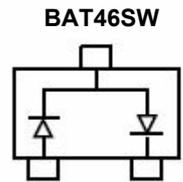
MARKING: S46



MARKING: A46



MARKING: C46



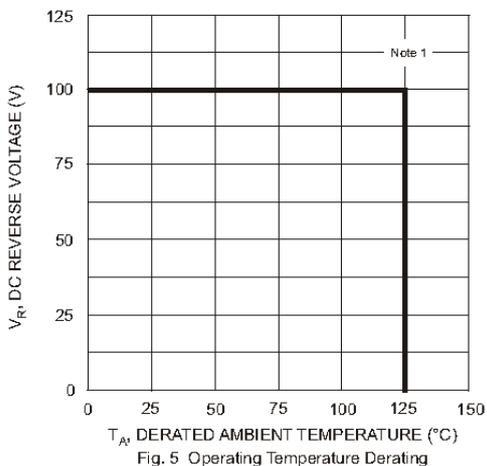
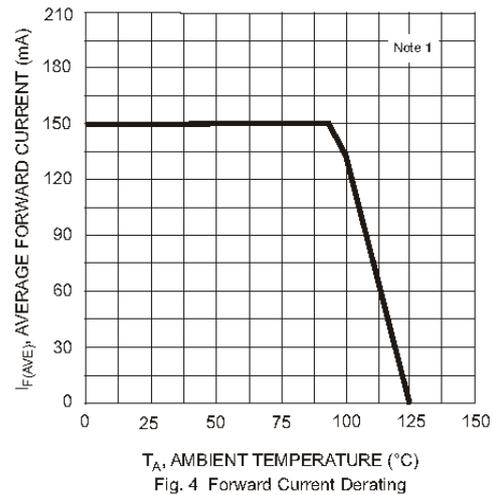
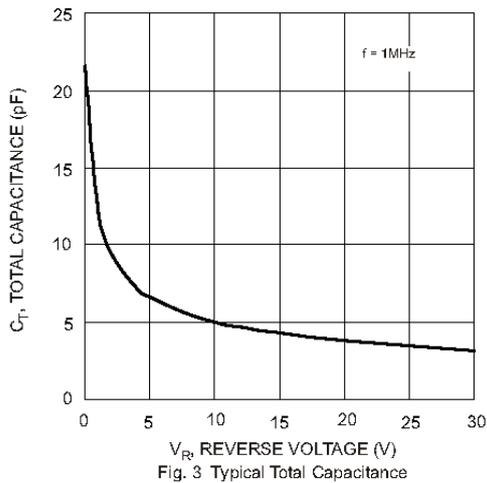
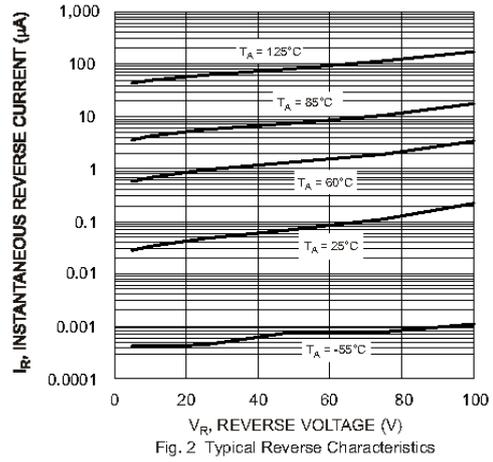
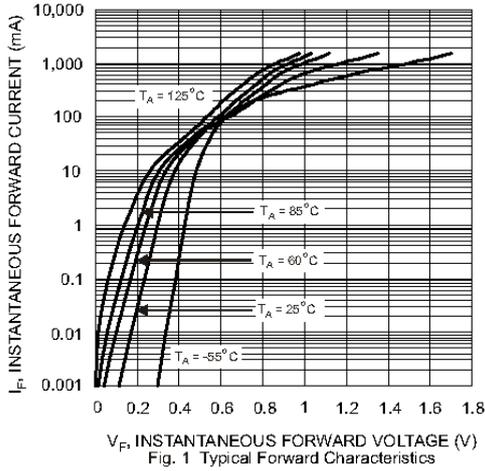
MARKING: B46

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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 $t_p < 1\text{ s}$)	I_{FRM}	350	mA
Surge Forward Current (at $t_p < 10\text{ ms}$)	I_{FSM}	750	mA
Operating Temperature Range	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	100	-	-	V
Forward Voltage at $I_F = 0.1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 250\text{ mA}$	V_F	-	-	0.25 0.45 1	V
Reverse Current at $V_R = 1.5\text{ V}$ at $V_R = 10\text{ V}$ at $V_R = 50\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 1.5\text{ V}, T_j = 60\text{ }^\circ\text{C}$ at $V_R = 10\text{ V}, T_j = 60\text{ }^\circ\text{C}$ at $V_R = 50\text{ V}, T_j = 60\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}, T_j = 60\text{ }^\circ\text{C}$	I_R	-	-	0.5 0.8 2 5 5 7.5 15 20	μA
Total Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$ at $V_R = 1\text{ V}, f = 1\text{ MHz}$	C_{tot}	-	20 12	-	pF



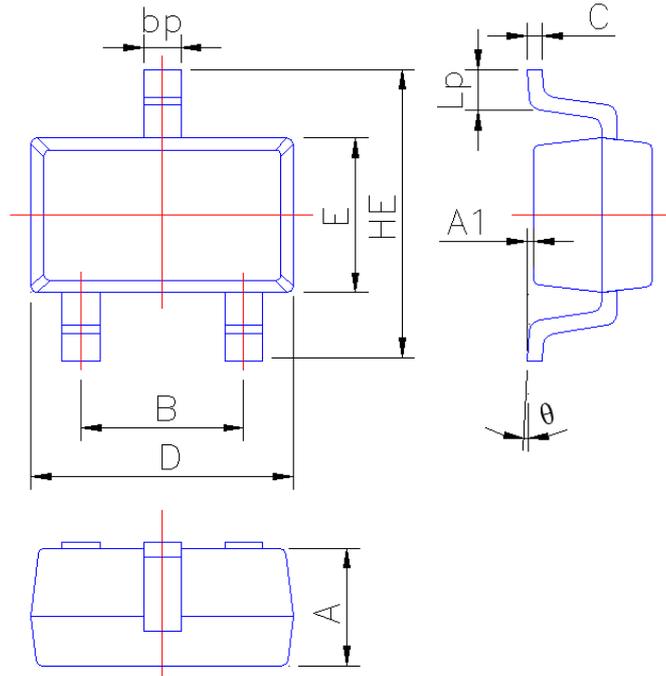
Note 1: Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.00
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.45
C	0.09	0.15
D	2.00	2.20
E	1.15	1.35
HE	2.15	2.55
Lp	0.25	0.46
θ	0°	6°