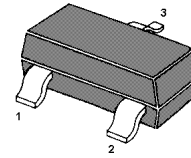


BAT46 / A / C / S

Surface Mount Schottky Barrier Diode

Features

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



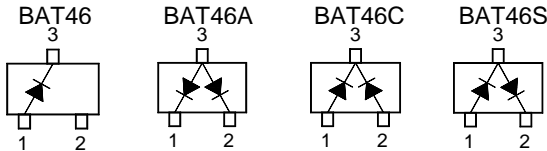
SOT-23 Plastic Package

BAT46 Marking Code: **S46**

BAT46A Marking Code: **A46**

BAT46C Marking Code: **C46**

BAT46S Marking Code: **B46**

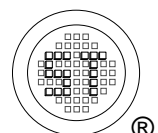


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

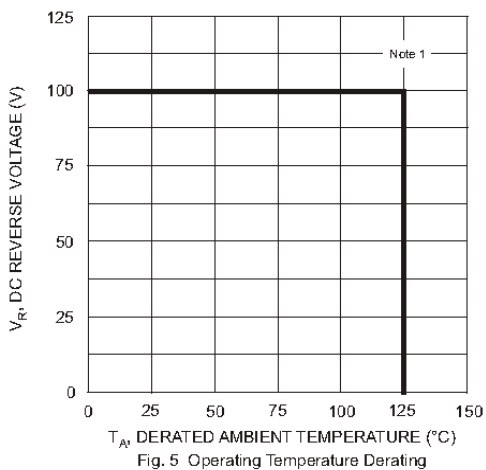
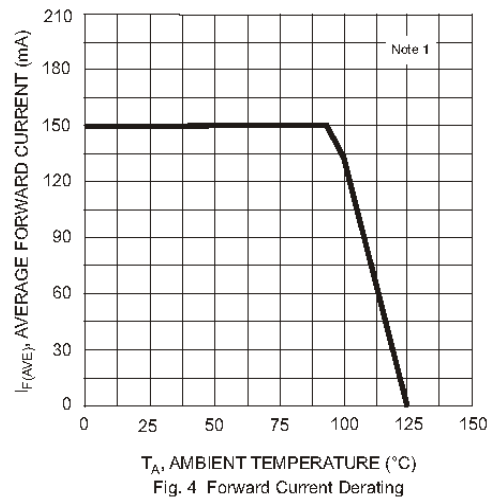
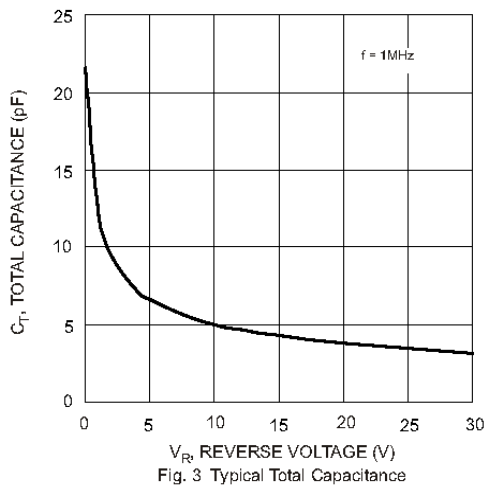
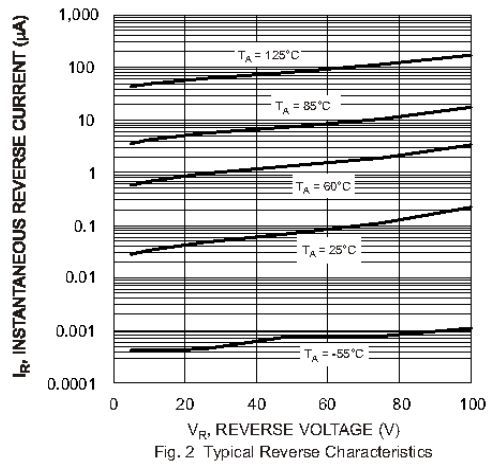
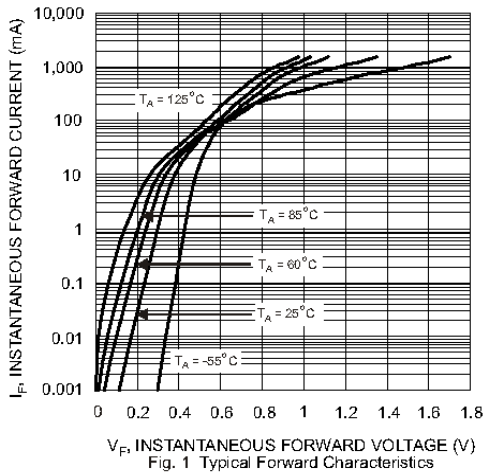
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	$I_{F(AV)}$	150	mA
Repetitive Peak Forward Current (at $t_p < 1\text{ s}$)	I_{FRM}	350	mA
Surge Forward Current (at $t_p < 10\text{ ms}$)	I_{FSM}	750	mA
Operating Temperature Range	T_j	150	$^\circ\text{C}$
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



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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>.

