



GP
ELECTRONICS

BAS40W Series

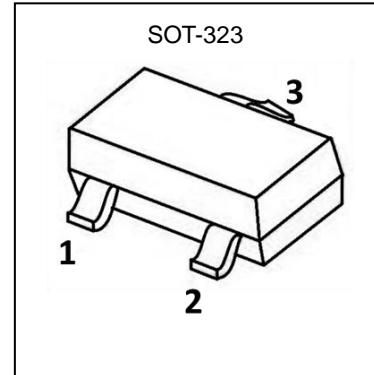
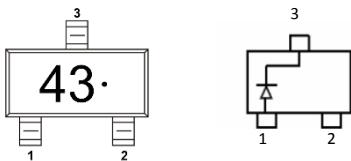
40V-0.2A Schottky Barrier Diode

BAS40W Series Schottky Barrier Diode

Feature

- Extremely Fast Switch Speed
- Low Forward Voltage

MARKING:



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	0.12	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	0.6	A
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Forward voltage	V_{F1}	$I_F=1\text{mA}$			0.38	V
	V_{F2}	$I_F=10\text{mA}$			0.50	V
	V_{F3}	$I_F=40\text{mA}$			1	V
Reverse current	I_R	$V_R=30\text{V}$			1	μA
		$V_R=40\text{V}$			10	μA
Capacitance between terminals	C_T	$V_R=1\text{V}, f=1\text{MHz}$			5	pF

Typical Characteristics

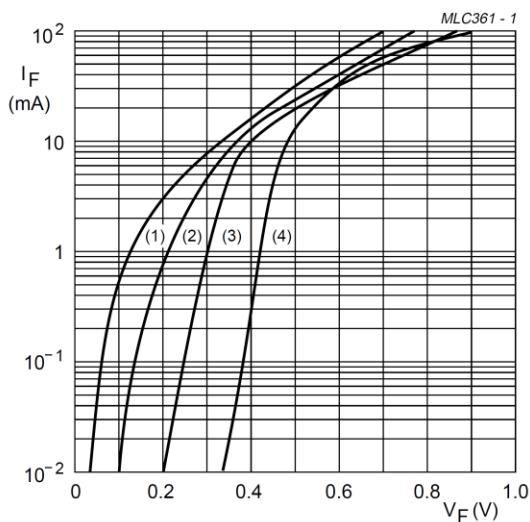


Fig.3 Forward current as a function of forward voltage; typical values.

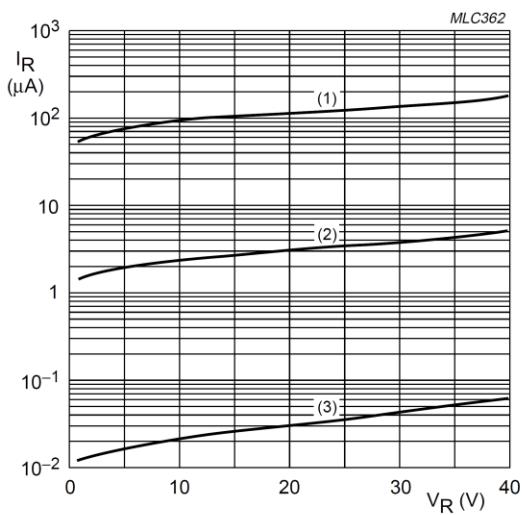


Fig.4 Reverse current as a function of reverse voltage; typical values.

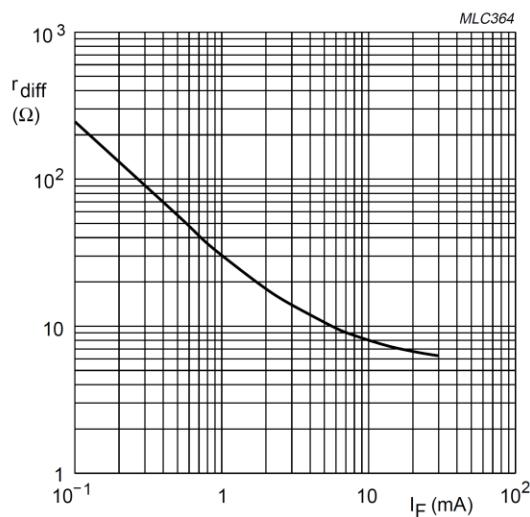


Fig.5 Differential forward resistance as a function of forward current; typical values.

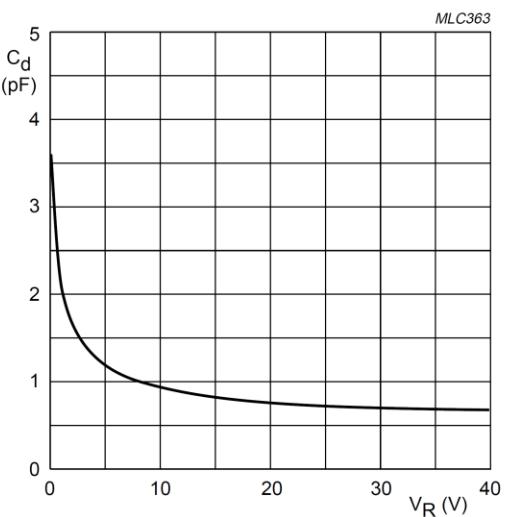
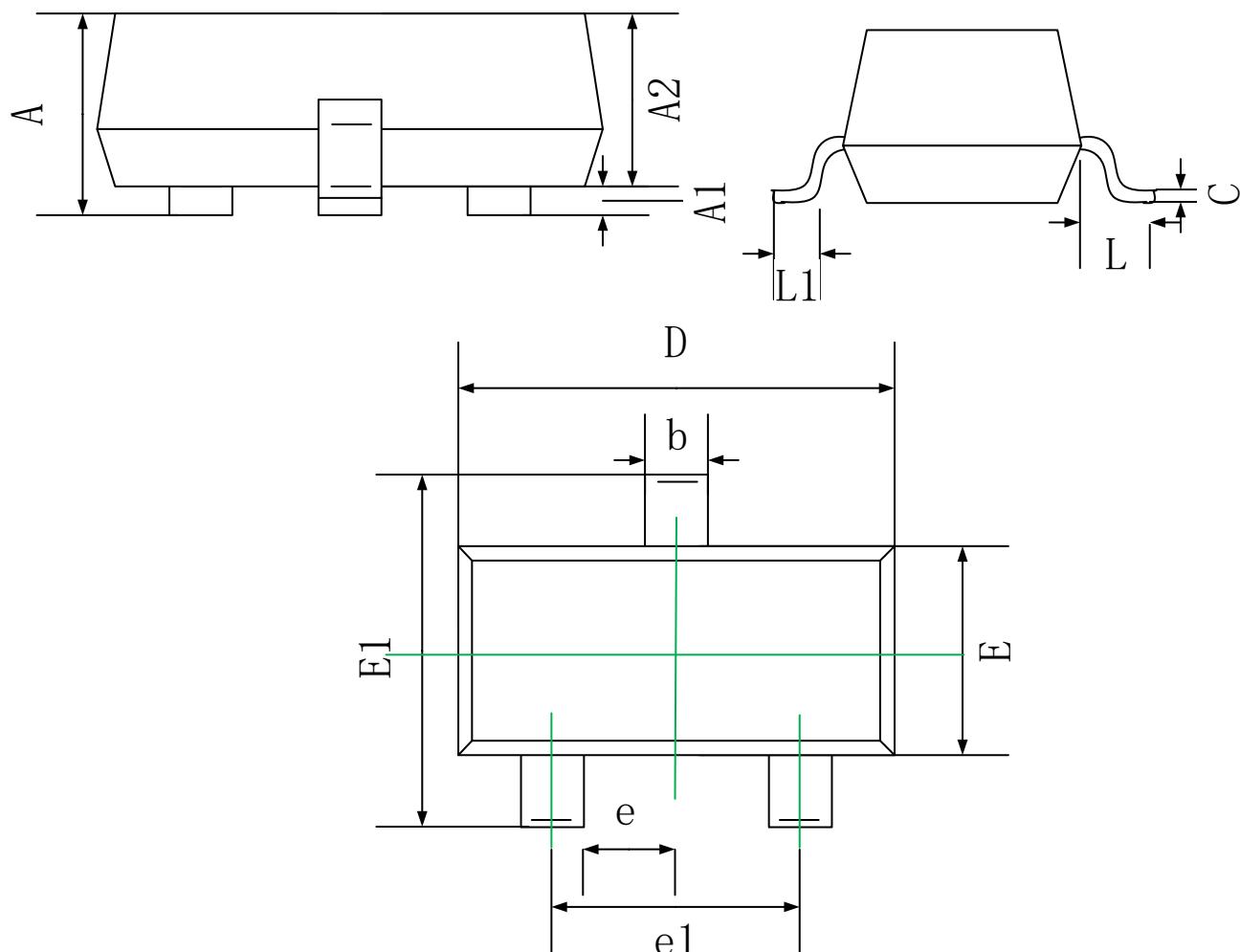


Fig.6 Diode capacitance as a function of reverse voltage; typical values.

SOT-323 Package Outline Dimensions


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.30	0.50
c	0.10	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.40
e	0.65 TYP.	
e1	1.20	1.40
L	0.525 REF.	
L1	0.26	0.46