

Shottky Barrier Diode

30V, 700mA Rectifier

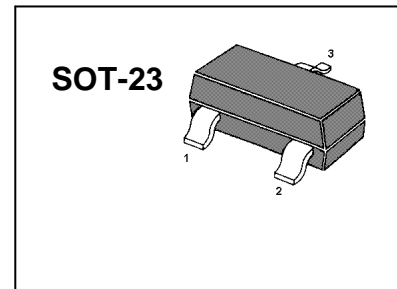
Applications

- High frequency rectification (switching regulators, converters, choppers).

Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (t_{rr} max=10ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.

Plastic Package



Marking:J4

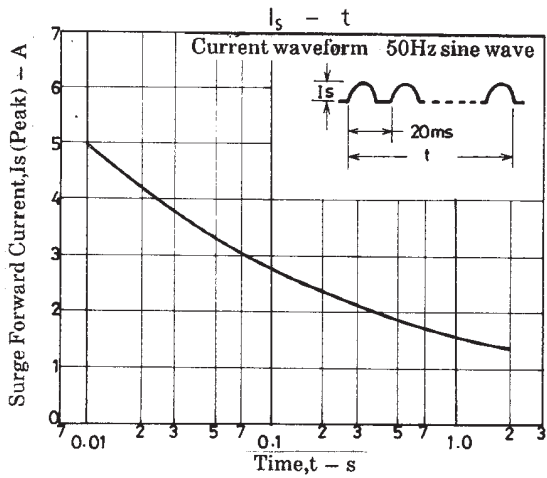
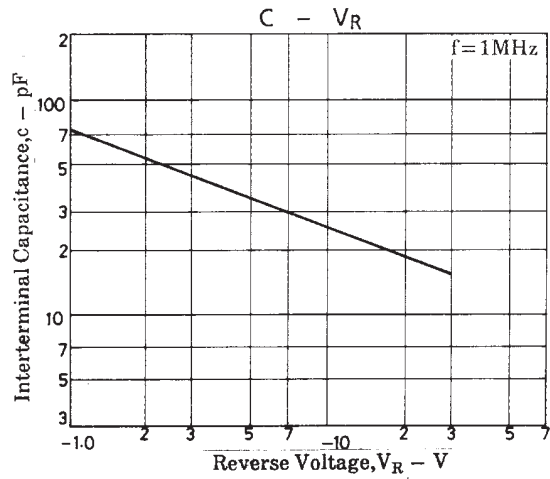
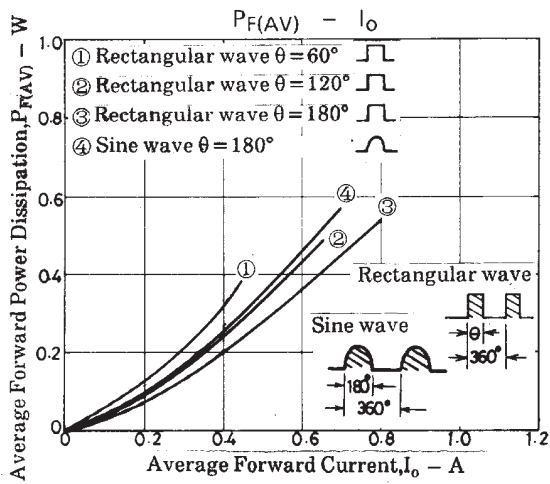
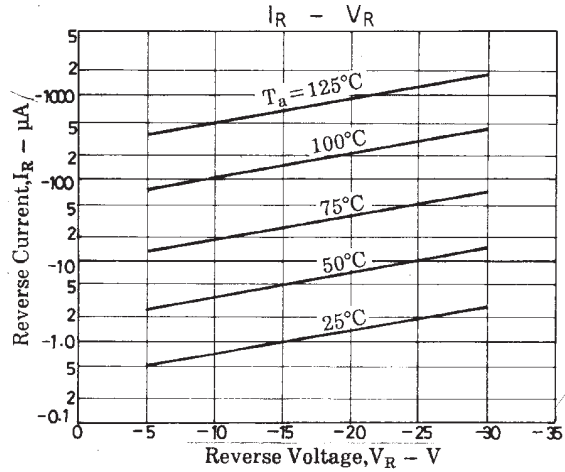
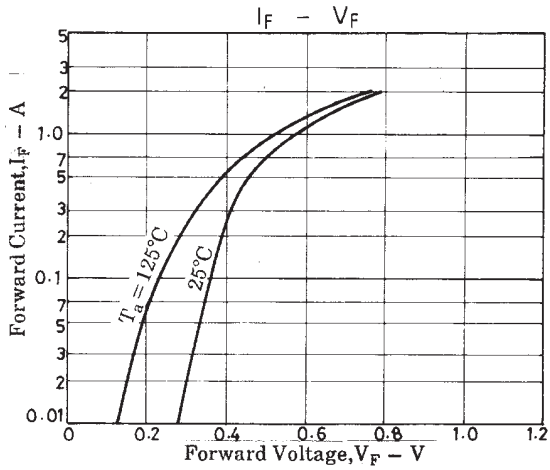
Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		700	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1cycle	5	A
Junction Temperature	T_J		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=300\mu\text{A}$	30			V
Forward Voltage	V_F	$I_F=700\text{mA}$			0.55	V
Reverse Current	I_R	$V_R=15\text{V}$			80	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		25		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit			10	ns
Thermal Resistance	Rthj-a(1)			420		$^\circ\text{C/W}$
	Rthj-a(2)	Mounted on Cu-foild area of $16\text{mm}^2 \times 0.2\text{mm}$ on glass epoxy board		330		$^\circ\text{C/W}$





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SOT-23

SB07-03C

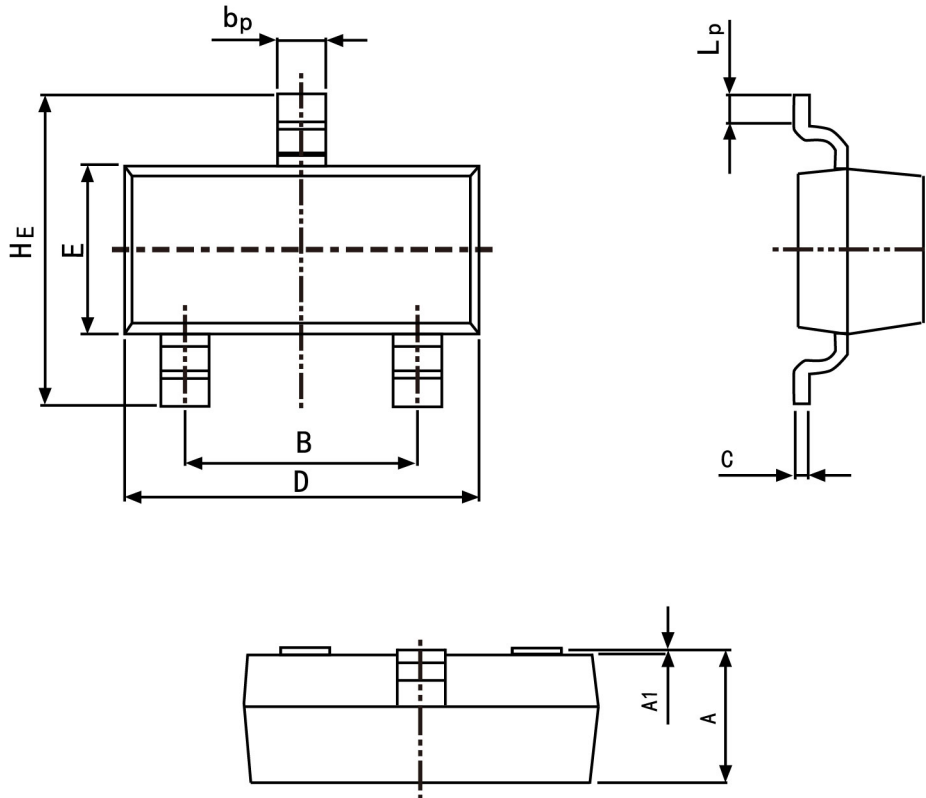


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PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.40
B	1.78	2.04
b_p	0.35	0.50
C	0.08	0.19
D	2.70	3.10
E	1.20	1.65
HE	2.20	3.00
A1	0.100	0.013
L_p	0.20	0.50