

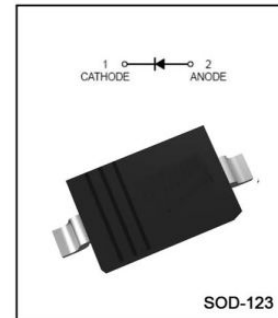


BAS40H

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 50V Forward Current - 0.5A

Features

- Trench MOS Schottky technology
- Low power losses, high efficiency
- Low forward voltage drop
- Available in SOD-123 Package

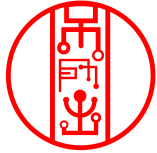


Mechanical data

- Case: SOD-123
- Approx. Weight: 0.01grams(approx.)
- Lead free finish, RoHS compliant
- Case Material: "Green" molding compound, UL flammability classification 94V-0, "Halogen-free".

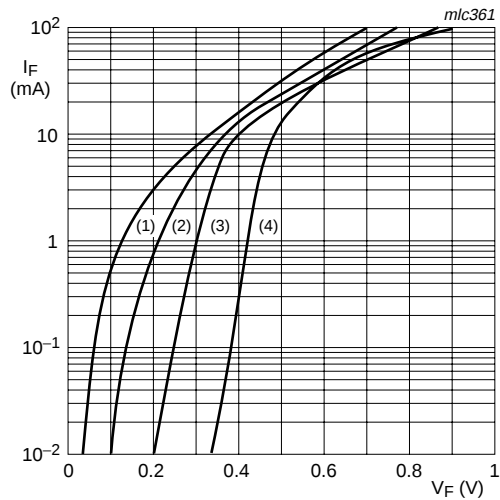
Electrical characteristic (Ta= 25°C)

Parameter		Symbol	Spec. Limit			Unit
			Min.	Typ.	Max.	
Max. Repetitive Peak Reverse Voltage @0.5mA		V_{RRM}	40	50		V
Max. Average Forward Rectified Current		$I_{F(AV)}$			0.5	A
Forward Voltage Drop	$I_F=0.2A$ $I_F=0.5A$	V_F		0.42 0.52	0.47 0.57	V
Max. Reverse Current at V_{RRM}	@40V	I_R		2.0	10	μA
Operating Temperature Range		T_J	-55		+125	°C
Storage Temperature Range		T_{STG}	-55		+150	°C



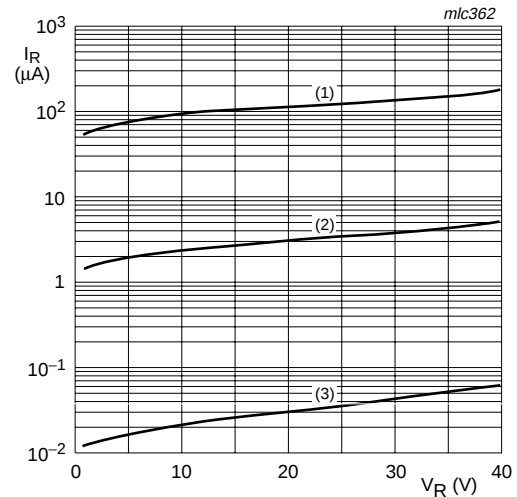
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Fig 1. Forward current as a function of forward voltage; typical values



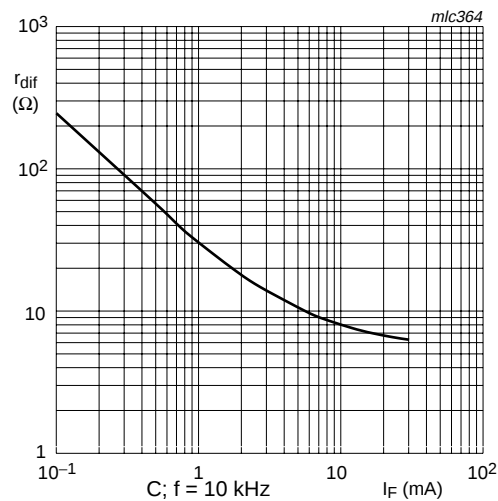
- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}$
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}$
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}$
- (4) $T_{amb} = -40\text{ }^{\circ}\text{C}$

Fig 2. Reverse current as a function of junction temperature



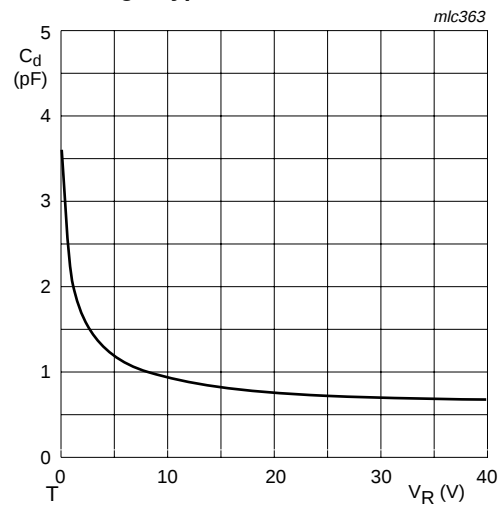
- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}$
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}$
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}$

Fig 3. Differential forward resistance as a function of forward current; typical values

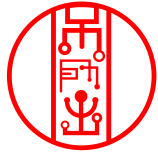


$T_{amb} = 25\text{ }^{\circ}$

Fig 4. Diode capacitance as a function of reverse voltage; typical values



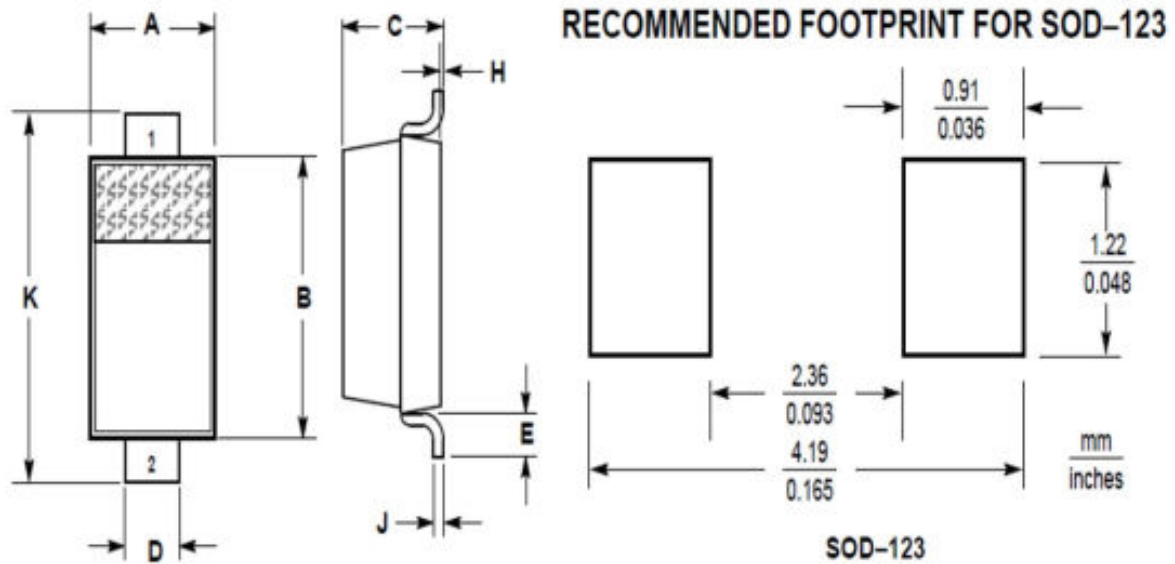
$amb = 25\text{ }^{\circ}\text{C}; f = 1\text{ MHz}$



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● PACKAGE INFORMATION

Dimension in SOD-123 Package (Unit: mm)



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.100	0.112	2.55	2.85
C	0.037	0.053	0.95	1.35
D	0.020	0.028	0.50	0.70
E	0.004	-	0.25	-
H	0.000	0.004	0.00	0.10
J	-	0.006	-	0.15
K	0.140	0.152	3.55	3.85