Elektronische Bauelemente

BAS40WS

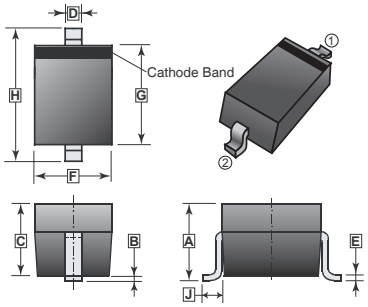
Surface Mount Schottky Barrier Diodes

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material –UL Recognition Flammability Classification 94V-O

SOD-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05 REF.		E	0.080	0.180
B	0.20 REF.		F	1.15	1.45
C	0.80	1.00	G	1.60	1.80
D	0.25	0.40	H	2.30	2.70

MARKING

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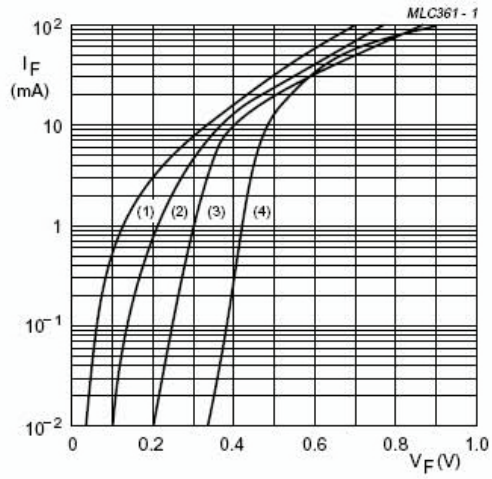
ABSOLUTE MAXIMUM RATINGS (Single diode, at Ta = 25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Peak Repetitive Peak reverse voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_F	200	mA
Peak Forward Surge Current, t≦1.0 s	I_{FSM}	600	mA
Thermal Resistance Junction−to−Ambient	$R_{\theta JA}$	625	°C/W
Power Dissipation	P_D	200	mW
Junction, Storage Temperature	T_J, T_{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (at Ta = 25°C unless otherwise specified)

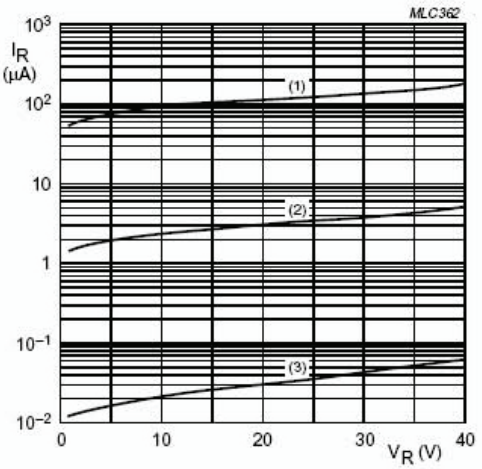
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	40	-	-	V	I_R = 10 μA
Reverse Current	I_R	-	20	200	nA	V_R = 30V
Forward Voltage	V_{F1}	-	-	380	mV	I_F = 1mA
	V_{F2}	-	-	500	mV	I_F = 10mA
	V_{F3}	-	-	1000	mV	I_F = 40mA
Diode Capacitance between Terminals	C_T	-	4.0	5.0	pF	V_R = 0, f=1MHz
Reverse Recovery Time	t_{RR}	-		5	nS	I_{RR} = 0.1XI_R, I_R=I_F=10mA, R_L=100Ω

RATINGS AND CHARACTERISTIC CURVES



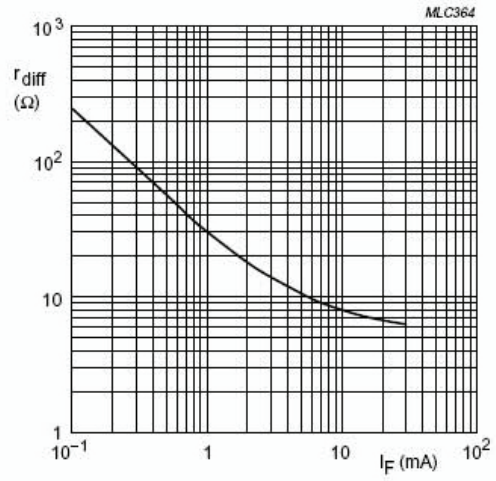
(1) T_{amb} = 150 °C.
(2) T_{amb} = 85 °C.
(3) T_{amb} = 25 °C.
(4) T_{amb} = −40 °C.

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



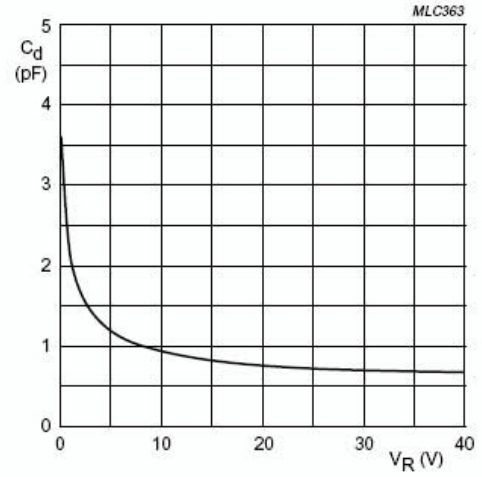
(1) T_{amb} = 150 °C.
(2) T_{amb} = 85 °C.
(3) T_{amb} = 25 °C.

Fig.2 Reverse current as a function of reverse voltage; typical values.



f = 10 KHz.

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



f = 1 MHz; T_{amb} = 25 °C.

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