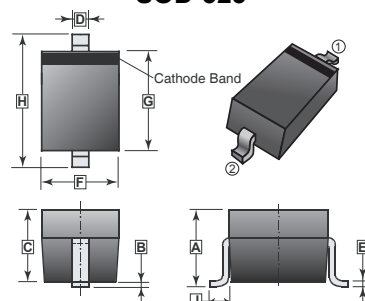


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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-0

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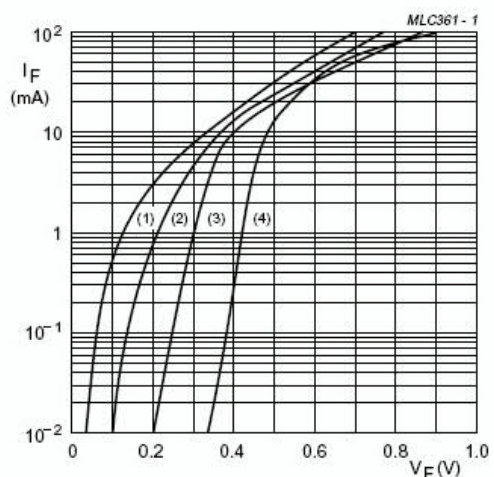
ABSOLUTE MAXIMUM RATINGS (Single diode, at Ta = 25°C unless otherwise specified)

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, $t \leq 1.0$ 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)

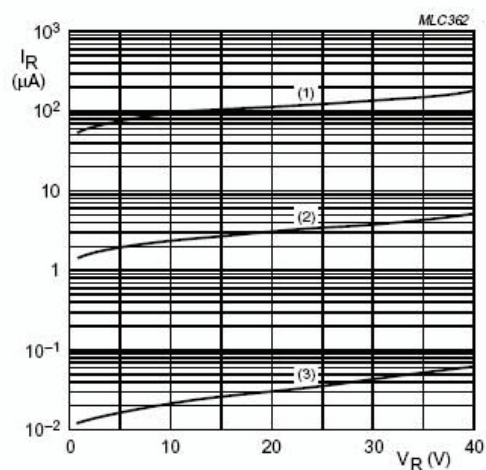
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	40	-	-	V	$I_R = 10 \mu A$
Reverse Current	I_R	-	20	200	nA	$V_R = 30V$
Forward Voltage	V_{F1}	-	-	380	mV	$I_F = 1mA$
	V_{F2}	-	-	500	mV	$I_F = 10mA$
	V_{F3}	-	-	1000	mV	$I_F = 40mA$
Diode Capacitance between Terminals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

RATINGS AND CHARACTERISTIC CURVES



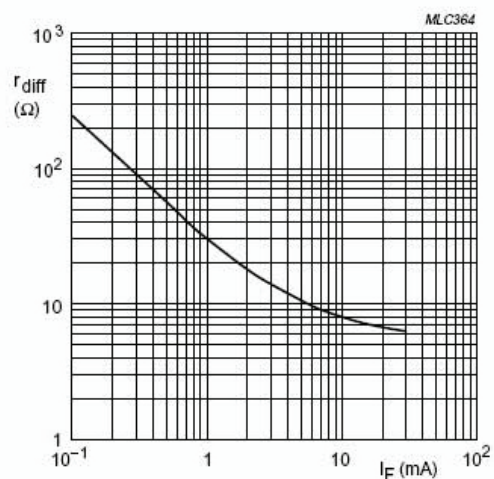
- (1) $T_{amb} = 150\text{ °C.}$
- (2) $T_{amb} = 85\text{ °C.}$
- (3) $T_{amb} = 25\text{ °C.}$
- (4) $T_{amb} = -40\text{ °C.}$

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



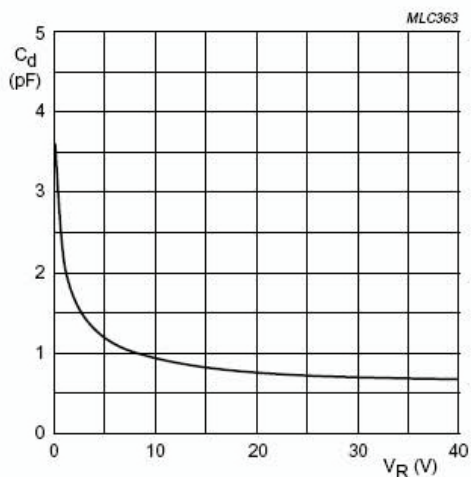
- (1) $T_{amb} = 150\text{ °C.}$
- (2) $T_{amb} = 85\text{ °C.}$
- (3) $T_{amb} = 25\text{ °C.}$

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; $T_{amb} = 25\text{ °C.}$

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