



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOD-323 Plastic-Encapsulate Diodes

BAS40WS SCHOTTKY DIODES

SOD-323

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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

MARKING: 43

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25

Parameter	Symbol	Limits	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 @<1.0s	I _{FSM}	600	mA
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Storage temperature	T _{STG}	-55 to +150	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}	40			V	I _R =10μA
Forward voltage	V _{F1}			0.38	V	I _F =1mA
	V _{F2}			0.5	V	I _F =10mA
	V _{F3}			1	V	I _F =40mA
Reverse current	I _R		20	200	nA	V _R =30V
Capacitance between terminals	C _T		4	5	pF	V _R =0V, f=1MHz
Reverse Recovery Time	t _{rr}			5	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

Typical Characteristics

BAS40WS

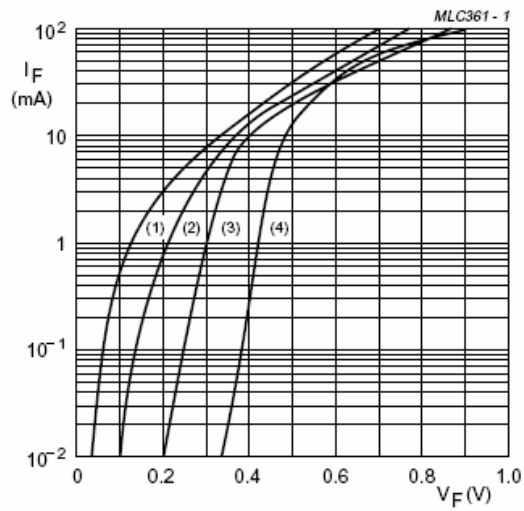


Fig.1 Forward current as a function of forward voltage; typical values.

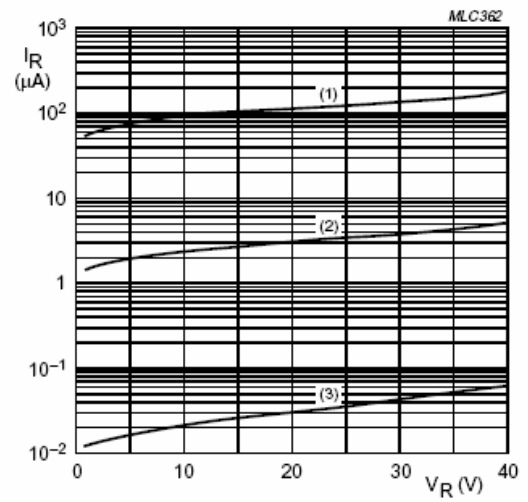


Fig.2 Reverse current as a function of reverse voltage; typical values.

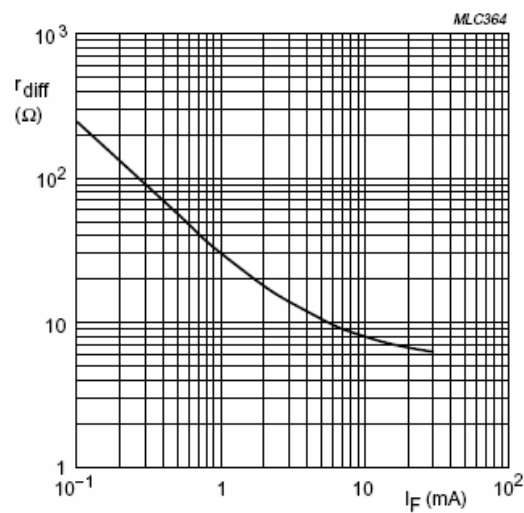


Fig.3 Differential forward resistance as a function of forward current; typical values.

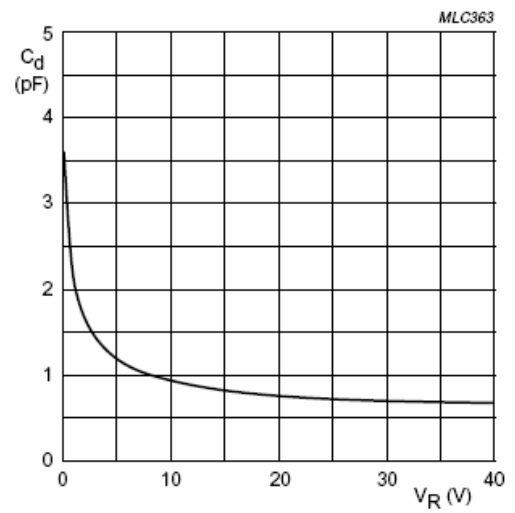


Fig.4 Diode capacitance as a function of reverse voltage; typical values.