



70mA 70V Schottky Barrier Rectifiers

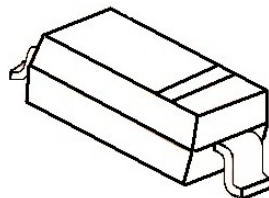
Features

- Fast Switching Device (TRR <4.0 nS)
- Low Turn-on Voltage
- PN Junction Guard Ring for Transient and ESD Protection

Mechanical Data

- Case : SOD-323 Small Outline Plastic Package
- Polarity : Color band denotes cathode end
- Mounting Position : Any

SOD-323



Marking: K73

Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameters	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Peak Repetitive Reverse Voltage	V_{RRM}	70	V
Power Dissipation	P_d	200	mW
Operating junction temperature range(note 1)	T_j	-55 to +125	$^{\circ}\text{C}$
Storage temperature range	T_s	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	K/W
Forward Continuous Current(note 1)	I_F	70	mA
Non repetitive Peak Forward Surge Current @ $t_p=1.0s$; $T_A=25^{\circ}\text{C}$	I_{FSM}	100	mA

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

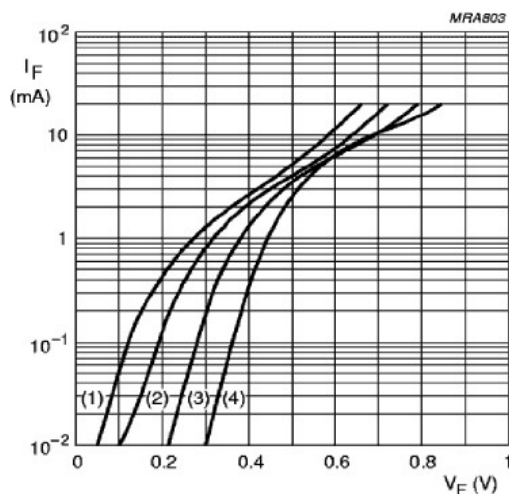
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
V(BR)	Reverse Voltage(note 2)	$I_R=10\mu\text{A}$	70		V
I_R	Reverse Leakage Current	$V_R=50\text{V}$; $t_p<300\mu\text{s}$	---	30	nA
VF	Forward Voltage	$I_F=1.0\text{mA}$; $t_p<300\mu\text{s}$	---	0.41	V
		$I_F=15\text{mA}$; $t_p<300\mu\text{s}$	---	1.00	
TRR	Reverse Recovery Time	$I_F=I_R=10\text{mA}$ to $I_R=10\text{mA}$	---	5	nS
		$R_L=100\Omega$			
CT	Capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$	---	2	pF

Notes: 1. Valid provided that electrodes are kept at ambient temperature.

2. Test period<3000us

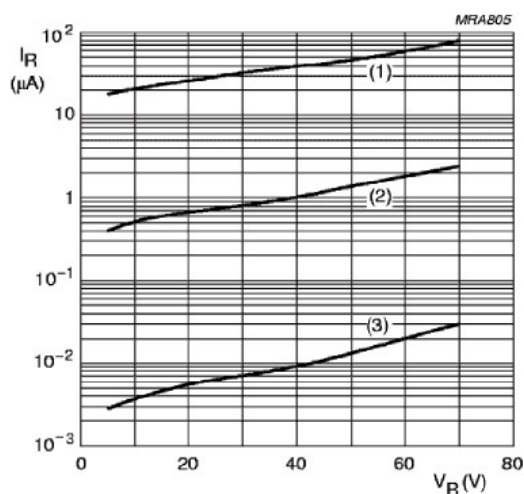


Ratings and Characteristic Curves



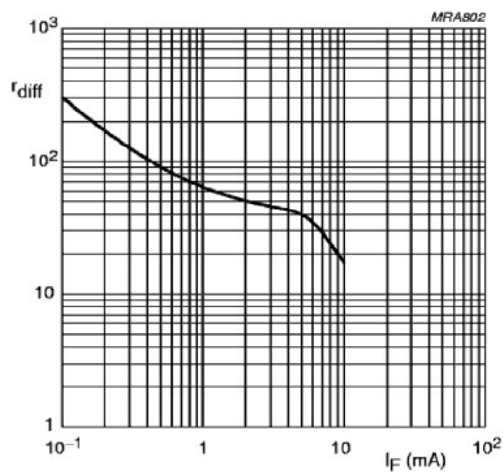
- (1) $T_{amb} = 125^\circ\text{C}$.
- (2) $T_{amb} = 85^\circ\text{C}$.
- (3) $T_{amb} = 25^\circ\text{C}$.
- (4) $T_{amb} = -40^\circ\text{C}$.

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



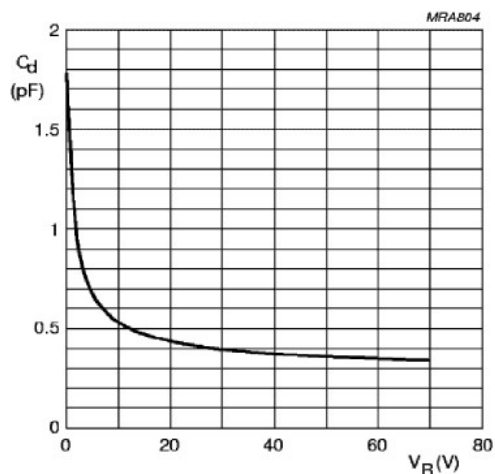
- (1) $T_{amb} = 125^\circ\text{C}$.
- (2) $T_{amb} = 85^\circ\text{C}$.
- (3) $T_{amb} = 25^\circ\text{C}$.

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



$f = 10 \text{ kHz}$.

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

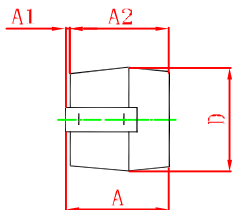
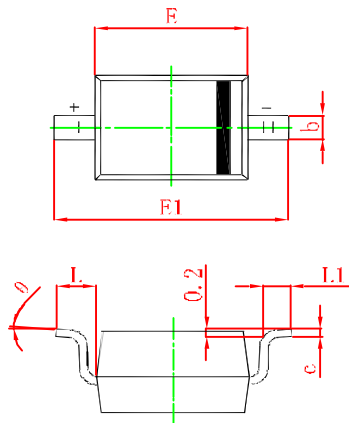


$f = 1 \text{ MHz}$; $T_{amb} = 25^\circ\text{C}$.

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



SOD-323 Package Information



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°