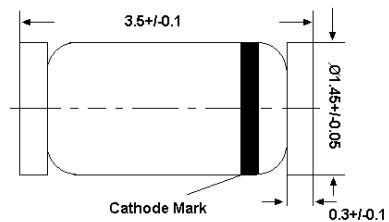


# BAS81

## Silicon Schottky Barrier Diodes

for general purpose applications

LL-34



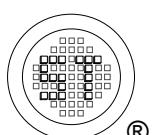
Glass case MiniMELF  
Dimensions in mm

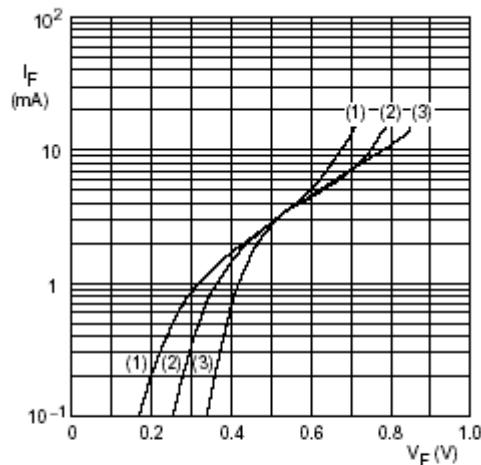
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	$I_F$	30	mA
Repetitive Peak Forward Current $t_p \leq 1 \text{ s}, \delta \leq 0.5$	$I_{FRM}$	150	mA
Repetitive Peak Forward Current $t_p = 1 \text{ s}$	$I_{FSM}$	500	mA
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	320	K/W
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

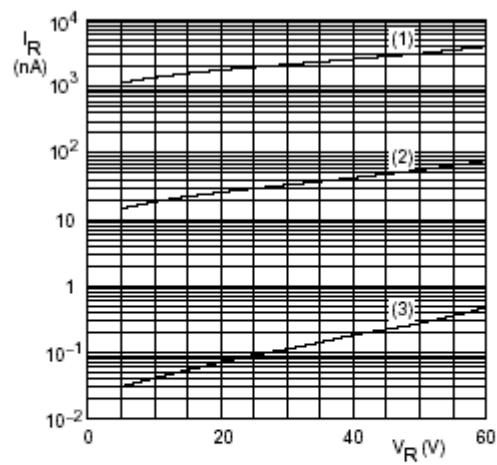
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.1 \text{ mA}$ at $I_F = 1 \text{ mA}$ at $I_F = 15 \text{ mA}$	$V_F$	0.33 0.41 1	V
Reverse Current at $V_R = 40$	$I_R$	200	nA
Total Capacitance at $V_R = 2 \text{ V}, f = 1 \text{ MHz}$	$C_{tot}$	1.6	pF





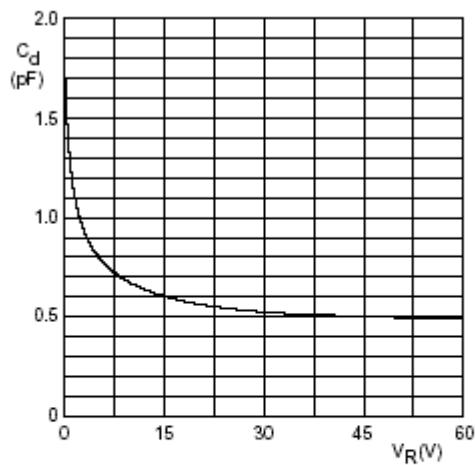
- (1)  $T_{amb} = 85 \text{ } ^\circ\text{C}.$
- (2)  $T_{amb} = 25 \text{ } ^\circ\text{C}.$
- (3)  $T_{amb} = -40 \text{ } ^\circ\text{C}.$

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



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

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



$f = 1 \text{ MHz.}$

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

