



## BAS85

DIODE

### SMALL SIGNAL SCHOTTKY DIODE

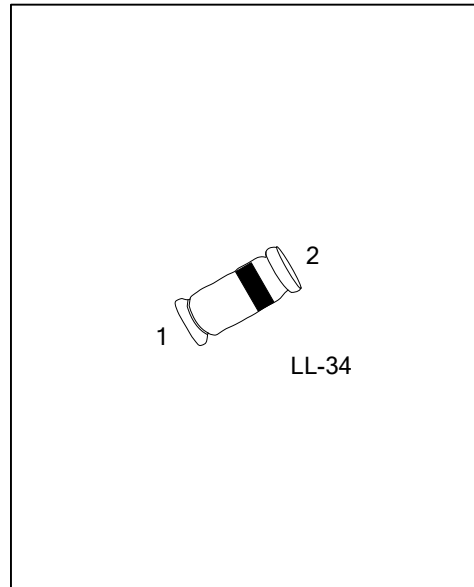
#### DESCRIPTION

The UTC **BAS85** is a small signal schottky diode, it uses UTC's advanced technology to provide customers with low forward voltage and high breakdown voltage, etc.

The UTC **BAS85** is suitable for general purpose applications.

#### FEATURES

- \* High breakdown voltage
- \* Low forward voltage
- \* Fast switching



#### ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
BAS85G-LL34-R	LL-34	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>BAS85G-LL34-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Green Package</li> </ul>	<ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) LL34: LL-34</li> <li>(3) G: Halogen Free and Lead Free</li> </ul>
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## ■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Continuous Reverse Voltage	$V_R$	30	V
Continuous Forward Current @ $T_A=25^\circ\text{C}$ (Note 1)	$I_F$	200	mA
Peak Forward Current @ $T_A=25^\circ\text{C}$ (Note 1)	$I_{FM}$	300	mA
Non-Repetitive Peak Forward Current @ $t_p < 1\text{s}$ , $T_A=25^\circ\text{C}$ (Note 1)	$I_{FSM}$	5	A
Power Dissipation @ $T_A=65^\circ\text{C}$ (Note 1)	$P_D$	200	mW
Junction Temperature	$T_J$	125	$^\circ\text{C}$
Operating Ambient Temperature	$T_A$	-55~+125	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55~+150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

## ■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 1)	$\theta_{JA}$	430	$^\circ\text{C/W}$

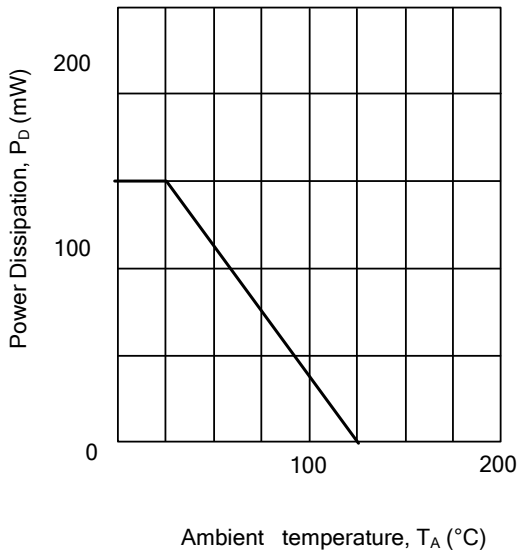
## ■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	$V_R$		30			V
Forward Voltage (Note 2)	$V_F$	$I_F=0.1\text{mA}$			0.24	V
		$I_F=1\text{mA}$			0.32	V
		$I_F=10\text{mA}$			0.4	V
		$I_F=30\text{mA}$		0.5		V
		$I_F=100\text{mA}$			0.8	V
Leakage Current	$I_R$	$V_R=25\text{V}$			2.0	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F=10\text{mA}, I_R=10\text{mA}, I_R=1\text{mA}$			5	ns
Junction Capacitance	$C_J$	$f=1\text{MHz}, V_R=1\text{V}$			10	pF

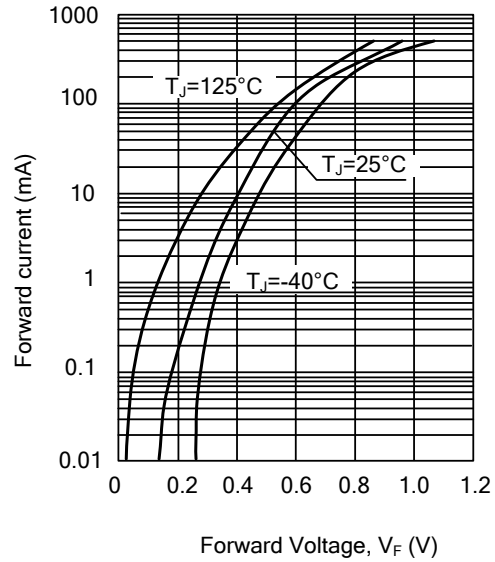
Notes: 1. Valid provided that leads at a distance of 4mm from case are kept at ambient temperature  
 2. Pulsed test:  $t_p < 300\mu\text{s}$ ;  $\delta < 2\%$ .

## TYPICAL CHARACTERISTICS

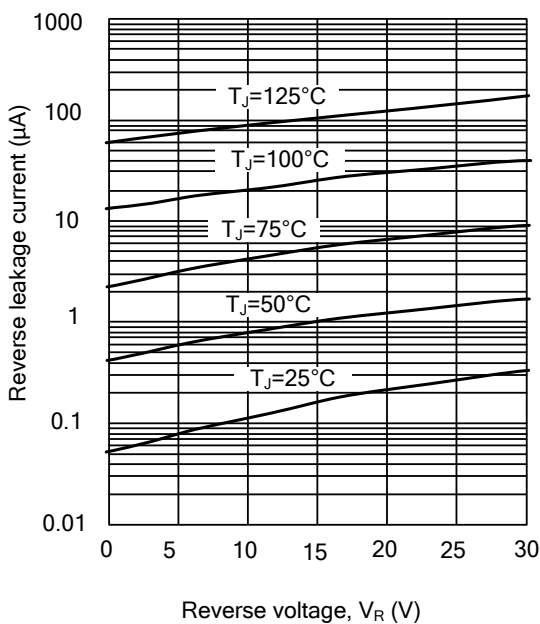
Admissible Power Dissipation vs. Ambient Temperature



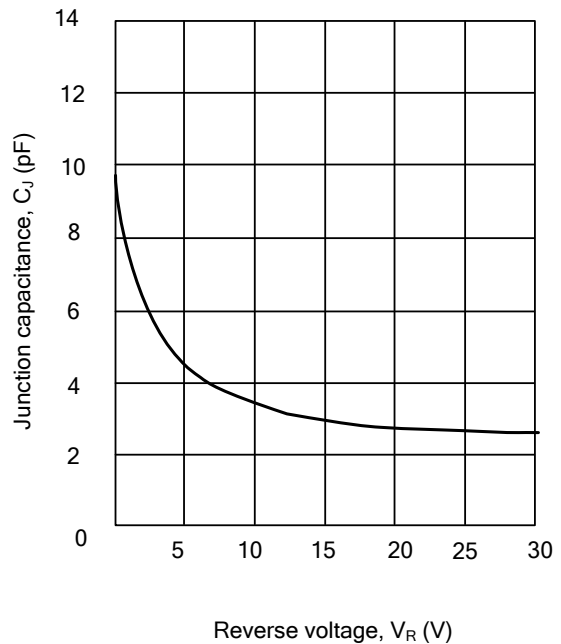
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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