



BAS85

DIODE

SMALL SIGNAL SCHOTTKY DIODE

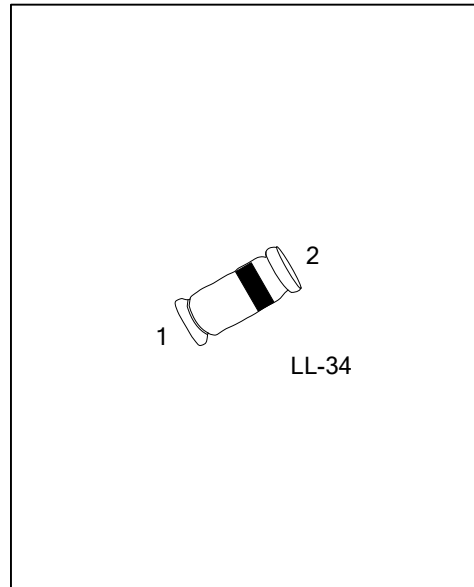
DESCRIPTION

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
Lead Free	Halogen Free		1	2	
BAS85L-LL34-R	BAS85G-LL34-R	LL-34	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>BAS85L-LL34-R</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p>	<p>(1) R: Tape Reel</p> <p>(2) LL34: LL-34</p> <p>(3) L: Lead Free, G: Halogen Free</p>
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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)	θ_{JA}	430	$^\circ\text{C/W}$

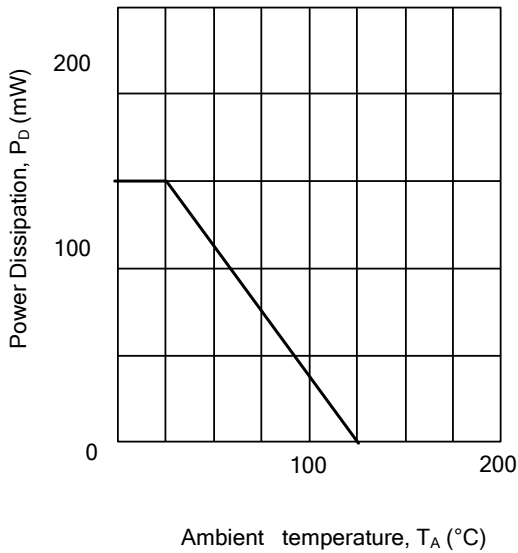
■ ELECTRICAL CHARACTERISTICS

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	μA
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

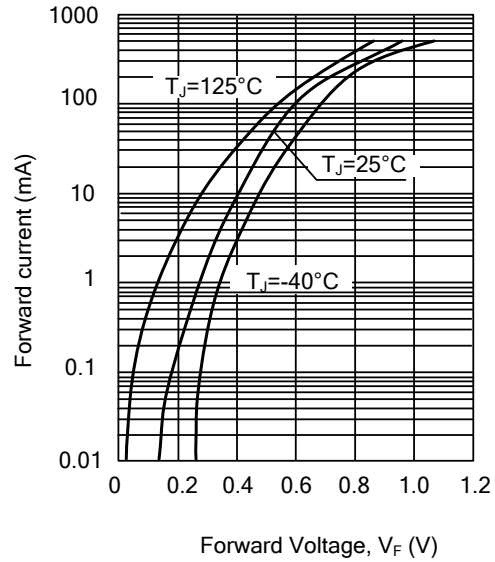
Notes: 1. Valid provided that leads at a distance of 4mm from case are kept at ambient temperature
 2. Pulsed test: $t_p < 300\mu\text{s}$; $\delta < 2\%$.

TYPICAL CHARACTERISTICS

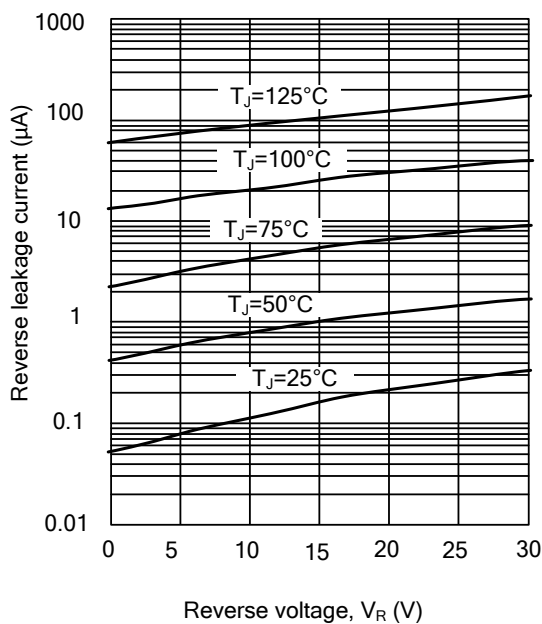
Admissible Power Dissipation vs. Ambient Temperature



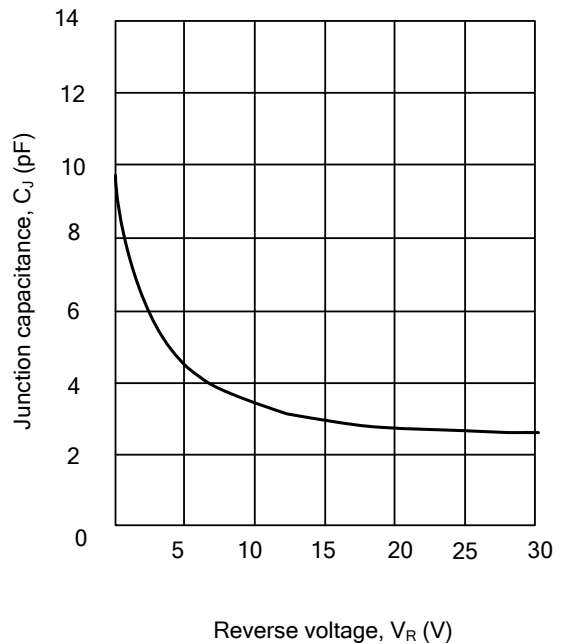
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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