



BAS40

DIODE

SCHOTTKY BARRIER DIODES

DESCRIPTION

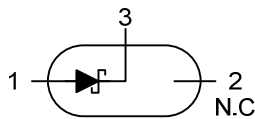
The UTC **BAS40** is schottky barrier diode, it uses UTC's advanced technology to provide customers with low forward voltage, etc.

The UTC **BAS40** is suitable for ultra high-speed switching, protection circuits, voltage clamping and blocking diodes.

FEATURES

- * Low forward voltage
- * Low diode capacitance
- * Guard ring protected

SYMBOL



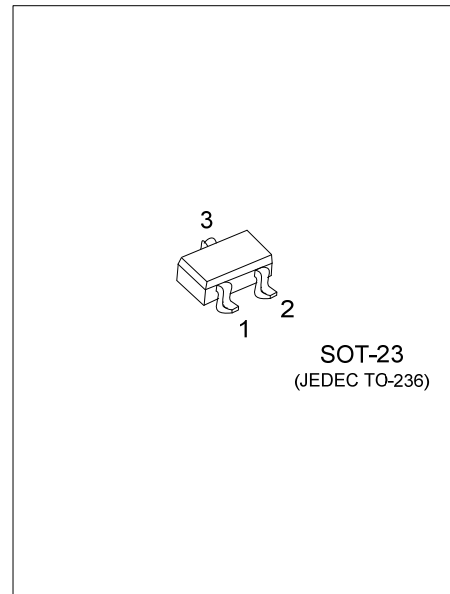
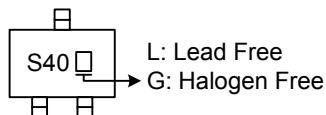
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BAS40L-AE3-R	BAS40G-AE3-R	SOT-23	A	NC	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode NC: No Connection

<p>BAS40G-AE3-R</p>	<p>(1) R: Tape Reel</p> <p>(2) AE3: SOT-23</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Continuous Reverse Voltage	V_R	40	V
Continuous Forward Current	I_F	120	mA
Non-Repetitive Peak Forward Current	I_{FSM}	200	mA
Operating Junction Temperature	T_J	+150	°C
Storage Temperature	T_{STG}	-65 ~ +150	°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 CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Junction to Ambient	θ_{JA}	330	K/W

■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	$I_F=1\text{mA}$			380	mV
		$I_F=10\text{mA}$			500	mV
		$I_F=40\text{mA}$			1	V
Reverse Current (Note)	I_R	$V_R=30\text{V}$			1	μA
		$V_R=40\text{V}$			10	μA
Diode Capacitance	C_D	$f=1\text{MHz}, V_R=0$			5	pF

Note: Pulse test: $t_p=300\mu\text{s}; \delta=0.02$.

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