



BAT721X

Preliminary

DIODE

SCHOTTKY BARRIER DIODES

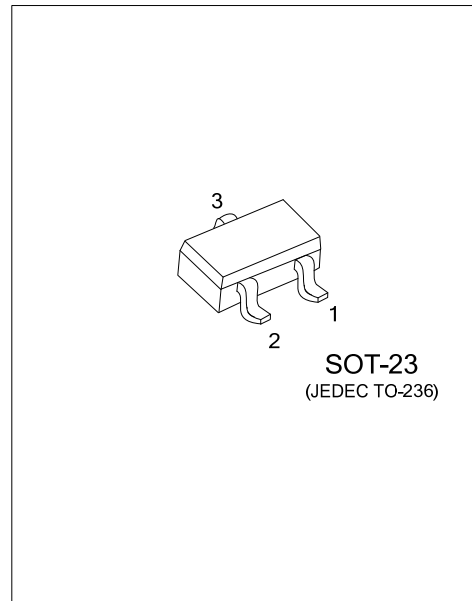
■ DESCRIPTION

The UTC **BAT721X** are schottky barrier diodes, it uses UTC's advanced technology to provide customers with low forward voltage drop and ultra high switching speed, etc.

The UTC **BAT721X** is suitable for applications such as ultra high-speed switching, protection circuits and voltage clamping.

■ FEATURES

- * Low forward voltage drop
- * Ultra high switching speed



■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
BAT721AG-AE3-R	SOT-23	K1	K2	A1A2	Tape Reel
BAT721CG-AE3-R	SOT-23	A1	A2	K1K2	Tape Reel

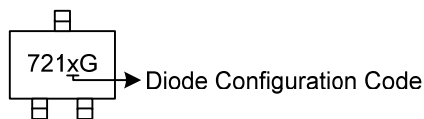
Note: Pin Assignment: A: Anode K: Cathode

<p>BAT721xG-AE3-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package (4) Diode Configuration 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) AE3: SOT-23 (3) G: Halogen Free and Lead Free (4) refer to DIODE CONFIGURATION AND SYMBOL
--	---

■ DIODE CONFIGURATION AND SYMBOL

BAT721A	BAT721C

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_J=25^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Continuous Reverse Voltage	V_R	40	V
Continuous Forward Current	I_F	200	mA
Non-Repetitive Peak Forward Current (half sine wave; JEDEC method; $t_p = 8.3$ ms)	I_{FSM}	1000	mA
Operating Junction Temperature	T_J	+125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65~+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 CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	500	K/W

Notes: Device mounted on an FR4 Printed-Circuit Board (PCB), single-sided copper, tin-plated and standard footprint.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Continuous Forward Voltage (Note 1)	V_F	$I_F=10\text{mA}$			300	mV
		$I_F=100\text{mA}$			420	mV
		$I_F=200\text{mA}$			550	mV
Continuous Reverse Current (Note 1)	I_R	$V_R=30\text{V}$			15	μA
		$V_R=30\text{V}, T_J=100^\circ\text{C}$			3	mA
Diode Capacitance (Note 2)	C_d	$V_R=0\text{V}, f=1\text{MHz}$		40	50	pF

Notes: 1. Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.