

**BAT721X**

Preliminary

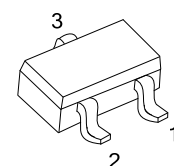
DIODE**SCHOTTKY BARRIER DIODES****■ DESCRIPTION**

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.

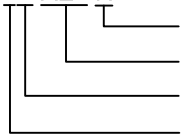
■ FEATURES

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

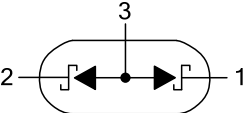
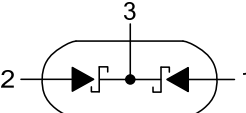
**SOT-23**
(JEDEC TO-236)**■ ORDERING INFORMATION**

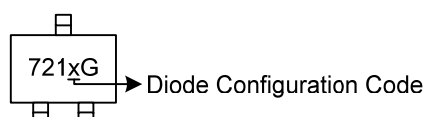
Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
BAT721AG-AE3-R	SOT-23	K1	K2	A1A2	Tape Reel
BAT721CG-AE3-R	SOT-23	A1	A2	K1K2	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

BAT721xG-AE3-R	
	(1) Packing Type (2) Package Type (3) Green Package (4) Diode Configuration
	(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; $t_p = 8.3\text{ ms}$)	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 = $300\mu\text{s}$, Duty Cycle $\leq 2.0\%$.

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

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