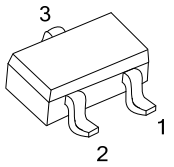
SCHOTTKY BARRIER DIODES



SOT-23
(JEDEC TO-236)

■ 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

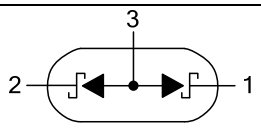
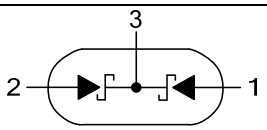
■ ORDERING INFORMATION

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

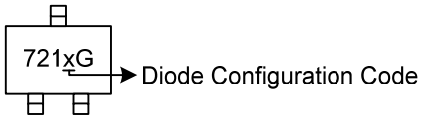
Note: Pin Assignment: A: Anode K: Cathode

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°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; tp = 8.3 ms)	I_{FSM}	1000	mA
Operating Junction Temperature	T_J	+125	°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	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°C unless otherwise specified)

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

Notes: 1. Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2.0%.
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.