

**UTC** UNISONIC TECHNOLOGIES CO., LTD

2SC4226

Preliminary

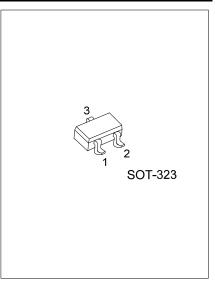
## NPN SILICON TRANSISTOR

# NPN SILICON EPITAXIAL TRANSISTOR

#### DESCRIPTION

The UTC 2SC4226 is a low supply voltage transistor designed for VHF, UHF low noise amplifier.

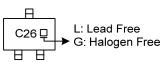
It is suitable for a high density surface mount assembly since the transistor has applied small mini mold package.



#### **ORDERING INFORMATION**

Order Number		Dookago	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
2SC4226L-xxx-AL3-R	2SC4226G-xxx-AL3-R	SOT-323	В	Е	С	Tape Reel	
Note: Pin Assignment: B: Base E: Emitter C: Collector							
2SC4226G-xxx-AL3-R	<ul> <li>(1) R: Tape Reel</li> <li>(2) AL3: SOT-323</li> <li>(3) xxx: refer to Classification of h<sub>FE</sub></li> <li>(4) G: Halogen Free and Lead Free, L: Lead Free</li> </ul>						

#### MARKING



## ■ **ABSOLUTE MAXIMUM RATING** (T<sub>A</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	BV <sub>CBO</sub>	20	V
Collector-emitter voltage	BV <sub>CEO</sub>	12	V
Emitter-Base Voltage	BV <sub>EBO</sub>	3	V
Collector Current	Ic	100	mA
Collector Dissipation	Pc	150	mW
Junction Temperature	TJ	+150	°C
Storage Temperature	T <sub>STG</sub>	-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.

## ■ ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CE</sub> =1V, I <sub>E</sub> =0			1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> =0			1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =3V, I <sub>C</sub> =7mA	40		250	
Transition Frequency	f⊤	V <sub>CE</sub> =3V, I <sub>C</sub> =7mA		4.5		GHz
Feedback Capacitance	Cre	V <sub>CE</sub> =3V, I <sub>E</sub> =0, f=1MHz		0.7		pF

Note: Pulsed:  $P_W \le 350\mu s$ , Duty Cycle  $\le 2\%$ .

## CLASSIFICATION OF h<sub>FE</sub>

RANK	R23	R24	R25
RANGE	40 ~ 80	70 ~ 140	125 ~ 250



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