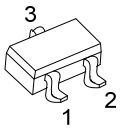
NPN SILICON EPITAXIAL TRANSISTOR



SOT-323

■ 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

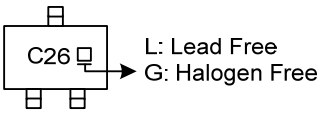
Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC4226L-xxx-AL3-R	2SC4226G-xxx-AL3-R	SOT-323	B	E	C	Tape Reel

Note: Pin Assignment: B: Base E: Emitter C: Collector

2SC4226G-xxx-AL3-R

(1)Packing Type	(1) R: Tape Reel
(2)Package Type	(2) AL3: SOT-323
(3)Rank	(3) xxx: refer to Classification of h_{FE}
(4)Green Package	(4) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATING (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	BV_{CBO}	20	V
Collector-emitter voltage	BV_{CEO}	12	V
Emitter-Base Voltage	BV_{EBO}	3	V
Collector Current	I_C	100	mA
Collector Dissipation	P_C	150	mW
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.

■ ELECTRICAL CHARACTERISTICS (T_J=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-off Current	I_{CBO}	V_{CE}=1V, I_E=0			1	μA
Emitter Cutoff Current	I_{EBO}	V_{CE}=1V, I_C=0			1	μA
DC Current Gain	h_{FE}	V_{CE}=3V, I_C=7mA	40		250	
Transition Frequency	f_T	V_{CE}=3V, I_C=7mA		4.5		GHz
Feedback Capacitance	C_{re}	V_{CE}=3V, I_E=0, f=1MHz		0.7		pF

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

■ CLASSIFICATION OF h_{FE}

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