2SC5006

PNP EPITAXIAL SILICON TRANSISTOR

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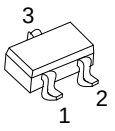


SOT-523

■ DESCRIPTION

The UTC **2SC5006** is an NPN epitaxial transistor; it uses UTC's advanced technology to provide the customers with low noise figure, high DC current gain and high current capability achieve a very wide dynamic range and excellent linearity.

The UTC **2SC5006** is suitable for low noise and small signal amplifiers from VHF band to UHF band.

■ FEATURES

* High DC current gain
* High current capability
* Low noise figure

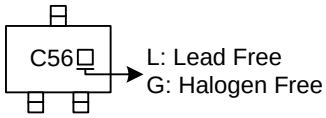
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen-Free		1	2	3	
2SC5006L-AN3-R	2SC5006G-AN3-R	SOT-523	B	E	C	Tape Reel

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

2SC5006G-AN3-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AN3: SOT-523 (3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	20	V
Collector-Emitter Voltage	V_{CEO}	12	V
Emitter-Base Voltage	V_{EBO}	3.0	V
Collector Current	I_C	100	mA
Total Power Dissipation	P_T	125	mW
Junction Temperature	T_J	+150	°C
Storage Temperature	T_{STG}	-60 ~ +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_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	V_{CB}=10V, I_E=0			1.0	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=1V, I_C=0			1.0	μA
DC Current Gain	h_{FE}	V_{CE}=3V, I_C=7mA (Note 1)	80		160	
Transition Frequency	f_T	V_{CE}=3V, I_C=7mA, f=1GHz		4.5		GHz
Feedback Capacitance	C_{re}	V_{CB}=3V, I_E=0, f=1.0MHz (Note 2)		0.7		pF

Notes: 1. Pulse measurement P_W≤350μs, duty cycle ≤ 2%.
2. The emitter terminal and the case shall be connected to the gurad terminal of the three-terminal capacitance bridge.