

# UTC2SA1627A PNPEPITAXIAL SILICON TRANSISTOR

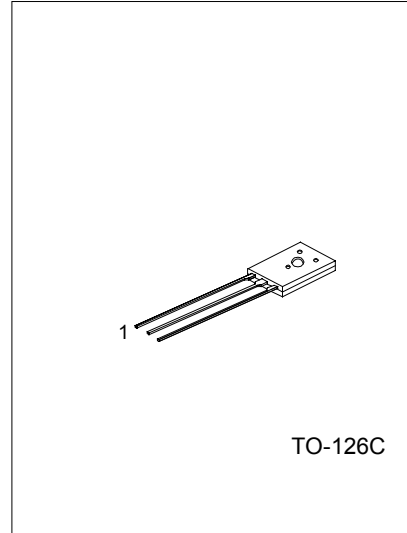
## PNP EPITAXIAL SILICON TRANSISTOR

### DESCRIPTION

The UTC 2SA1627A is designed for general purpose amplifier and high speed switching applications.

### FEATURES

- \*High voltage
- \*Low collector saturation voltage.
- \*High-speed switching



TO-126C

1:EMITTER 2:COLLECTOR 3:BASE

### ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	VCBO	-600	V
Collector-Emitter Voltage	VCEO	-600	V
Emitter-Base Voltage	VEBO	-7.0	V
Collector Power Dissipation	Pc	1.0	W
Collector Current(DC)	Ic	-1.0	A
Collector Current(PULSE)	Icp*1	-2.0	A
Junction Temperature	Tj	150	°C
Storage Temperature	TSTG	-55 to +150	°C

\*1 : PW ≦ 10ms, Duty Cycle ≦ 50%

### ELECTRICAL CHARACTERISTICS(Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	ICBO	VCB= -600V, IE=0			-10	μA
Emitter Cut-Off Current	IEBO	VEB= -7.0V, Ic=0			-10	μA
DC Current Gain	hFE1*2	VCE= -5.0V, Ic= -0.1A	30	58	120	
DC Current Gain	hFE2*2	VCE= -5.0V, Ic= -0.5A	4	19		
Collector-Emitter Saturation Voltage	VCE(sat)*2	Ic= -0.3A, Ib= -0.06A		-0.28	-1.5	V
Base-Emitter Saturation Voltage	VBE(sat)*2	Ic= -0.3A, Ib= -0.06A		-0.85	-1.2	V
Gain Bandwidth Product	fT	VCE= -10V, IE=0.1A	10	28		MHz

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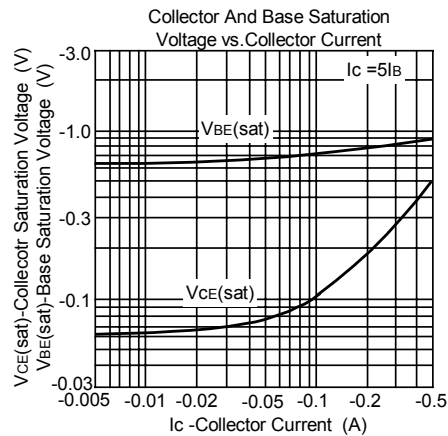
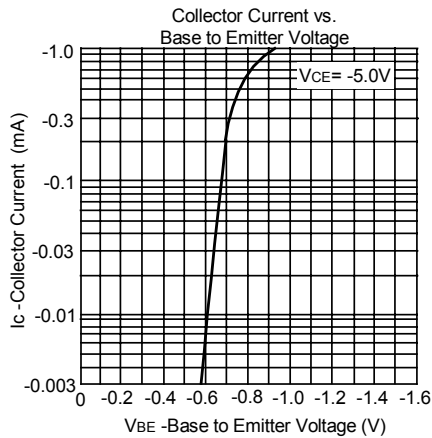
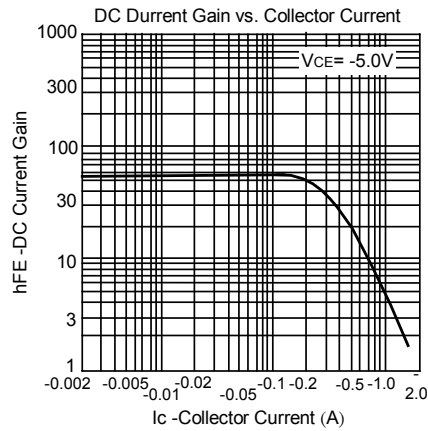
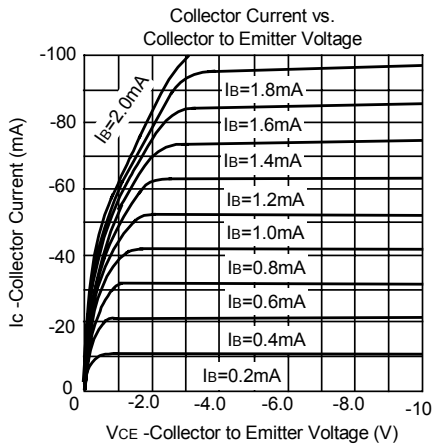
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Output Capacitance	Cob	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1.0MHz		42	50	pF
Turn-On Time	t <sub>on</sub>	I <sub>c</sub> = -0.5A, R <sub>L</sub> =500 Ω		0.1	0.5	μs
Storage Time	t <sub>stg</sub>	I <sub>B1</sub> = -I <sub>B2</sub> = -0.1A		3.5	5.0	μs
Fall Time	t <sub>f</sub>	V <sub>CC</sub> = -250V		0.08	0.5	μs

\*2 : Pulsed PW ≅ 350μs, Duty Cycle ≅ 2%

## CLASSIFICATION OF hFE1

RANK	M	L	K
RANGE	30-60	40-80	60-120

## TYPICAL CHARACTERISTICS

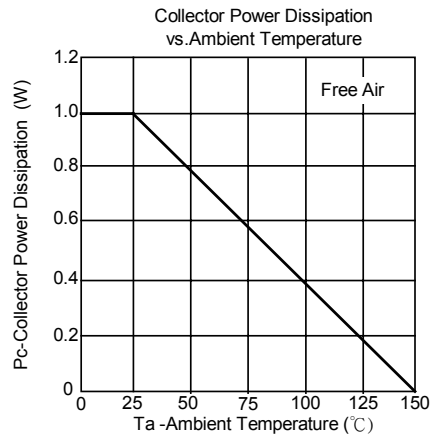
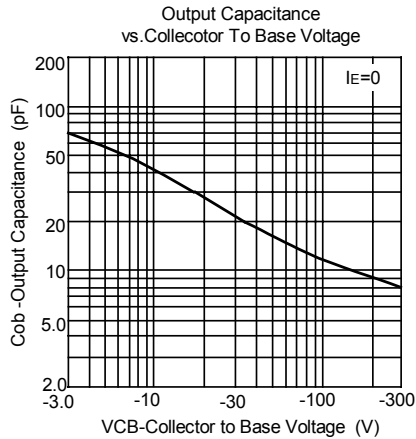
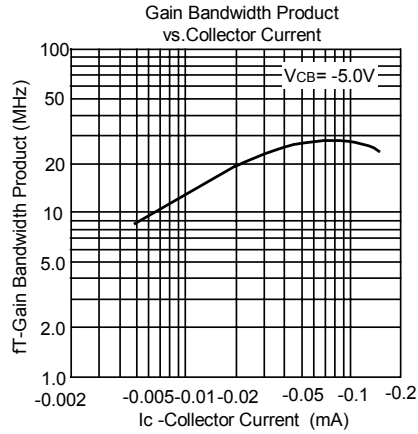
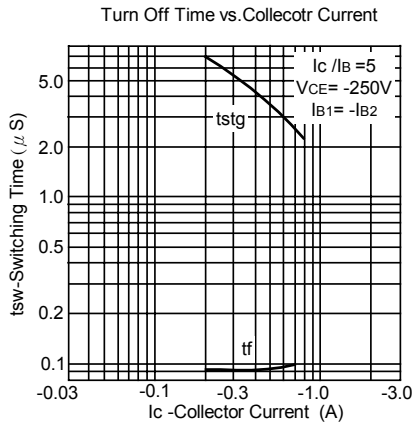


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