

UTC2SA1627 PNP EPITAXIAL SILICON TRANSISTOR

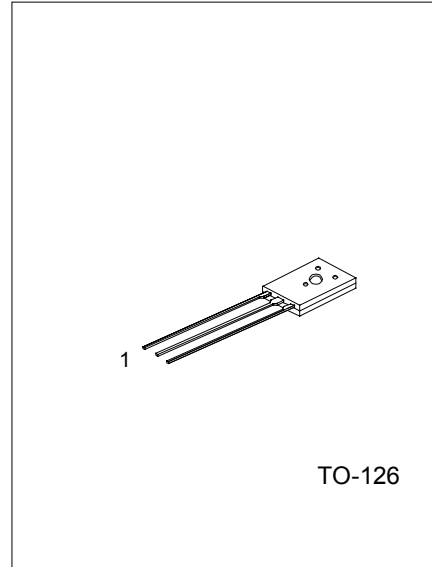
PNP EPITAXIAL SILICON TRANSISTOR

DESCRIPTION

The UTC 2SA1627 is designed for general purpose amplifier and high speed switching applications.

FEATURES

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



1:EMITTER 2:COLLECTOR 3:BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V _{CB0}	-600	V
Collector-Emitter Voltage	V _{CE0}	-600	V
Emitter-Base Voltage	V _{EB0}	-7.0	V
Collector Power Dissipation	P _c	1.0	W
Collector Current(DC)	I _c	-1.0	A
Collector Current(PULSE)	I _{cp} *1	-2.0	A
Junction Temperature	T _j	150	°C
Storage Temperature	T _{STG}	-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	I _{CBO}	V _{CB} = -600V, I _E =0			-10	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} = -7.0V, I _C =0			-10	μA
DC Current Gain	h _{FE1} *2	V _{CE} = -5.0V, I _C = -0.1A	30	58	120	
DC Current Gain	h _{FE2} *2	V _{CE} = -5.0V, I _C = -0.5A	5	19		
Collector-Emitter Saturation Voltage	V _{CE(sat)} *2	I _C = -0.3A, I _B = -0.06A		-0.28	-0.5	V
Base-Emitter Saturation Voltage	V _{BE(sat)} *2	I _C = -0.3A, I _B = -0.06A		-0.85	-1.2	V
Gain Bandwidth Product	f _T	V _{CE} = -10V, I _E =0.1A	10	28		MHz

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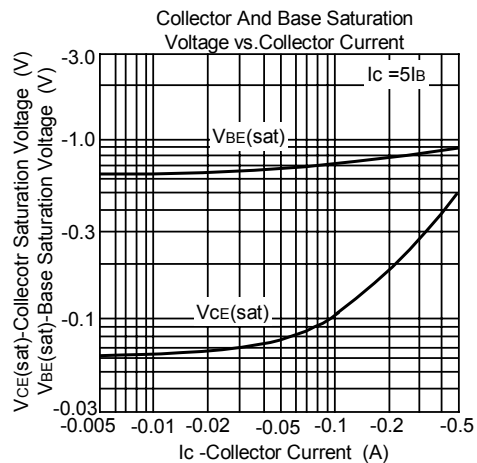
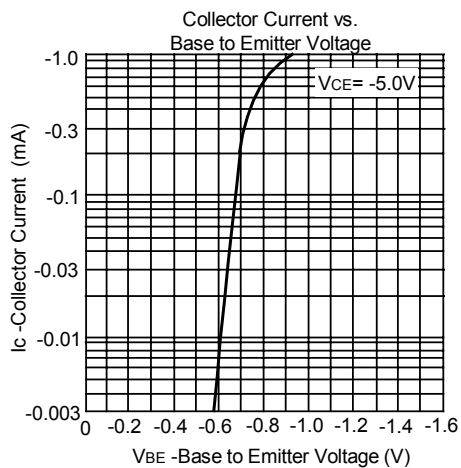
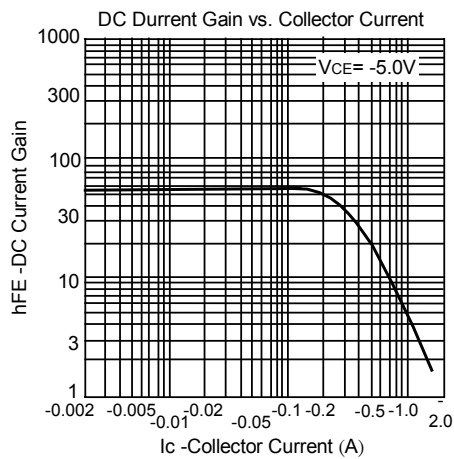
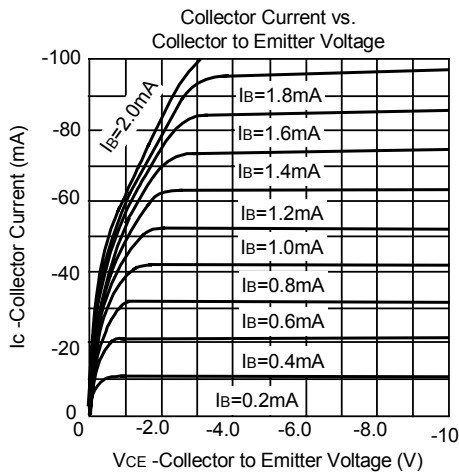
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Output Capacitance	Cob	V _{CB} = -10V, I _E =0, f=1.0MHz		42	50	pF
Turn-On Time	t _{on}	I _c = -0.5A, R _L =500 Ω		0.1	0.5	μs
Storage Time	t _{stg}	I _{B1} = -I _{B2} = -0.1A		3.5	5.0	μs
Fall Time	t _f	V _{cc} = -250V		0.08	0.5	μs

*2 : Pulsed PW ≦ 350μs, Duty Cycle ≦ 2%

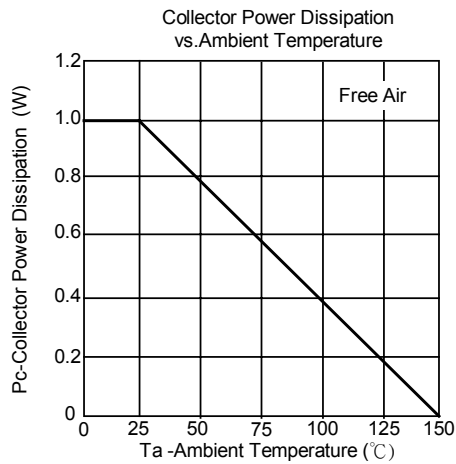
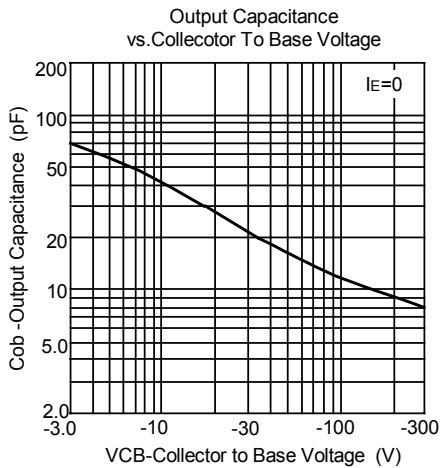
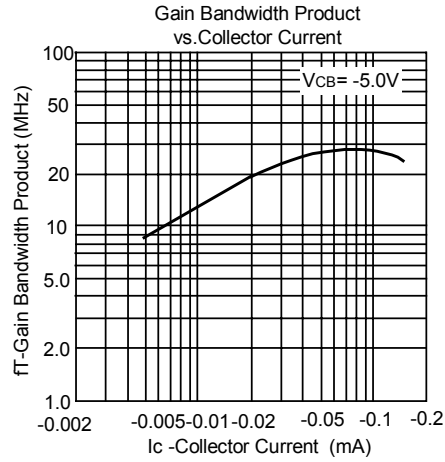
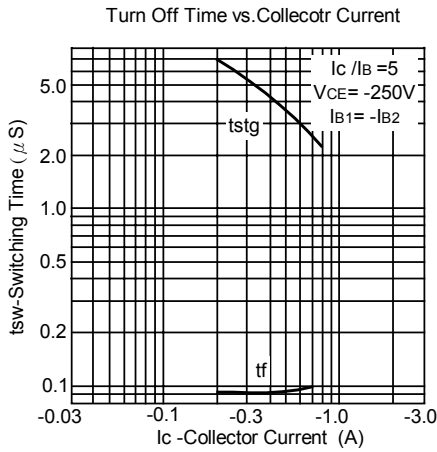
CLASSIFICATION OF hFE1

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

TYPICAL CHARACTERISTICS



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