2SA1627A

Preliminary ***PNP EPITAXIAL SILICON TRANSISTOR***

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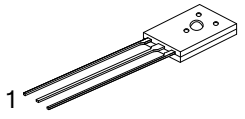
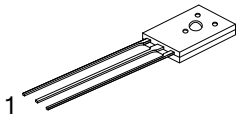


TO-126C



TO-126

■ 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

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SA1627AL-T60-K	2SA1627AG-T60-K	TO-126	E	C	B	Bulk
2SA1627AL-T6C-K	2SA1627AG-T6C-K	TO-126C	E	C	B	Bulk

2SA1627AL-T6C- K
(1)Packing Type
(2)Package Type
(3)Halogen Free

(1) K: Bulk
(2) T6C: TO-126C, T60: TO-126
(3) Halogen Free, L: Lead Free

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-600	V
Collector-Emitter Voltage	V_{CEO}	-600	V
Emitter-Base Voltage	V_{EBO}	-7.0	V
Collector Power Dissipation	P_C	1.0	W
Collector Current (DC)	I_C	-1.0	A
Collector Current (Pulse)	I_{CP} (Note 1)	-2.0	A
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Notes: 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.
1. PW≦10ms, Duty Cycle≦50%

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

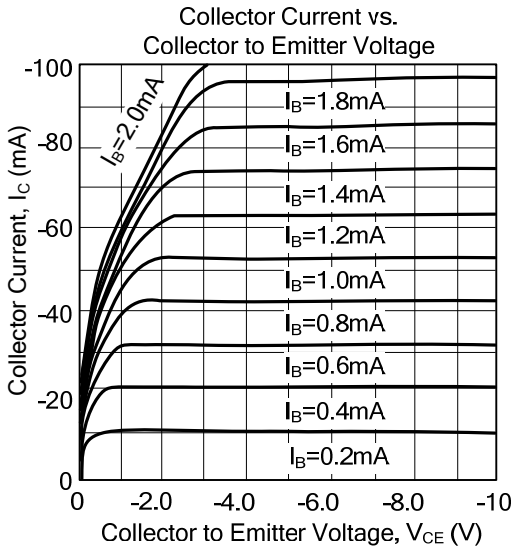
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I_{CBO}	V_{CB}= -600V, I_E=0			-10	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}= -7.0V, I_C=0			-10	μA
DC Current Gain	h_{FE1} (Note 2)	V_{CE}= -5.0V, I_C= -0.1A	30	58	120	
DC Current Gain	h_{FE2} (Note 2)	V_{CE}= -5.0V, I_C= -0.5A	4	19		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$ (Note 2)	I_C= -0.3A, I_B= -0.06A		-0.28	-1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$ (Note 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
Output Capacitance	C_{ob}	V_{CB}= -10V, I_E=0, f=1.0MHz		42	50	pF
Turn-On Time	t_{on}	I_C=-0.5A, R_L=500Ω, I_{B1}= -I_{B2}= -0.1A, V_{CC} =-250V		0.1	0.5	μs
Storage Time	t_{stg}			3.5	5.0	μs
Fall Time	t_f			0.08	0.5	μs

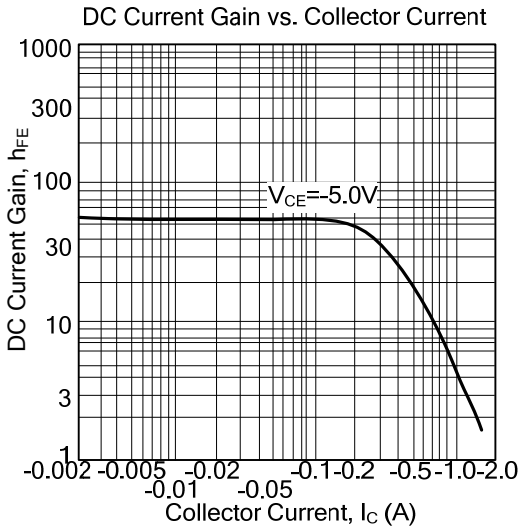
Note: 2. Pulsed PW≦350μs,Duty Cycle≦2%

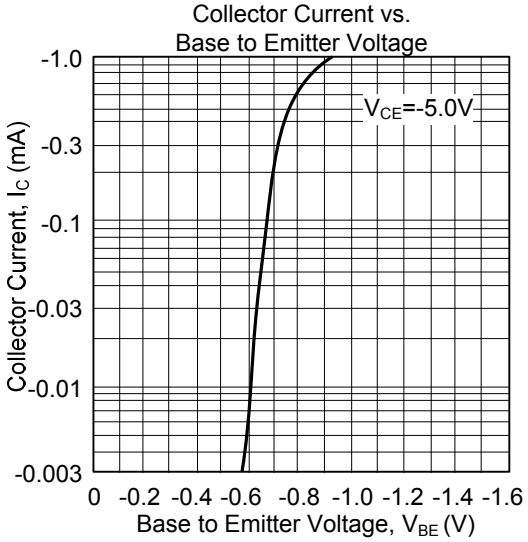
■ CLASSIFICATION OF h_{FE1}

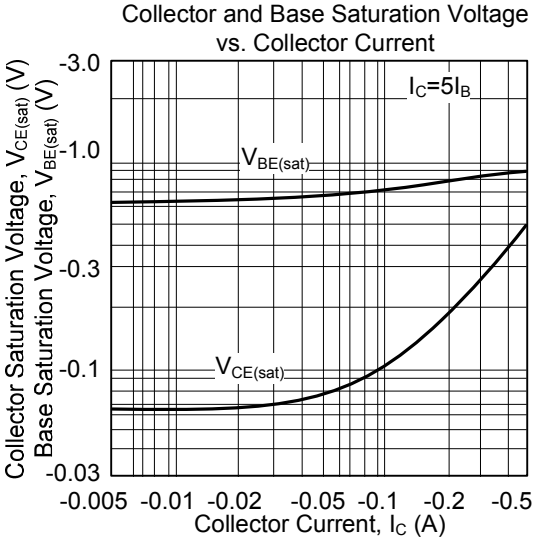
RANK	M	L	K
RANGE	30-60	40-80	60-120

■ TYPICAL CHARACTERISTICS









■ TYPICAL CHARACTERISTICS(Cont.)