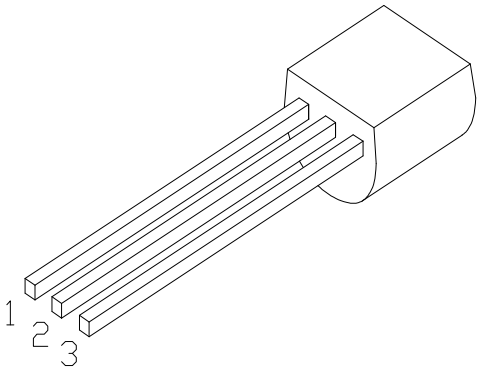
◆*Si NPN*

◆*RoHS COMPLIANT*

1. APPLICATION

Charger、Emergency lamp and
Electric toy control circuit



1 Emitter(E) 2 Collector(C) 3 Base(B)

2. FEATURES

- Features of good high temperature
- High switching speed

3. PACKAGE

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4. Electrical Characteristics

4.1 Absolute Maximum Ratings

T_{amb}= 25℃ unless specified

PARAMETER		SYMBOL	VALUE	UNIT
Collector-Base Voltage		V_{CBO}	60	V
Collector-Emittor Voltage		V_{CEO}	40	V
Emittor- Base Voltage		V_{EBO}	5	V
Collector Current		I_C	2	A
Power Dissipation	Ta=25℃	P_{tot}	0.8	W
	Tc=25℃		12	
Junction Temperature		T_j	150	℃
Storage Temperature		T_{stg}	-55～150	℃

4.2 Electrical Parameter

T_{amb}= 25℃ unless specified

PARAMETER	SYMBOL	TEST CONDITION	VALUE			UNIT
			MIN	TYP	MAX	
Collector-Base Voltage	BV_{CBO}	I_C=1mA,I_E=0	60			V
Collector-Emittor Voltage	BV_{CEO}	I_C=1mA ,I_B=0	40			V
Emittor-Base Voltage	BV_{EBO}	I_E=1mA,I_C=0	5			V
Collector-Base Cutoff Current	I_{CBO}	V_{CB}=60V, I_E=0			10	μA
Collector-Emittor Cutoff Current	I_{CEO}	V_{CE}=40V, I_B=0			20	μA
Emittor-Base Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0			10	μA
DC Current Gain	h_{FE}*	V_{CE}=3V, I_C=1mA	100			
		V_{CE}=3V, I_C=300mA	100		400	
Collector-Emittor Saturation Voltage	$V_{CE\ sat}$*	I_C=2A, I_B=0.2A			0.8	V
Base-Emittor Saturation Voltage	$V_{BE\ sat}$*	I_C=2A, I_B=0.2A			1.2	V
Typical Frequency	f_T	V_{CE}=5V,I_C=100mA, f=10MHz	50			MHz

*: Pulse test tp≤300μs, δ≤2%

5. Characteristic Curve

Fig1 Static Characteristic

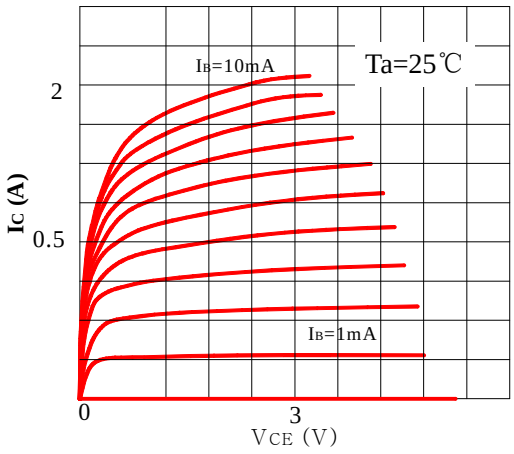


Fig2 h_{FE}-I_C

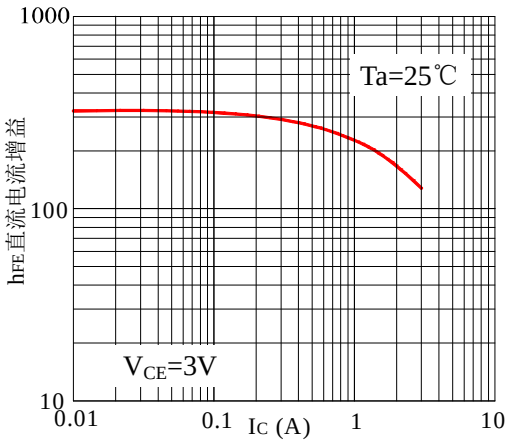


Fig3 V_{CEsat}-I_C

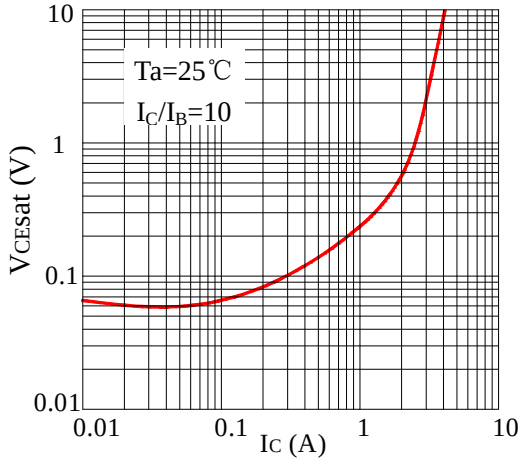
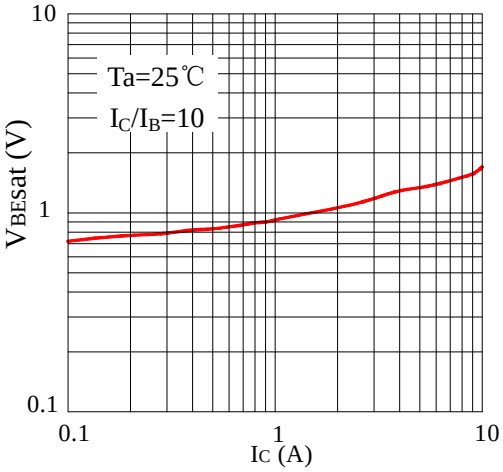


Fig4 V_{BEsat}-I_C



6. Package Dimentions(Unit：mm)

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