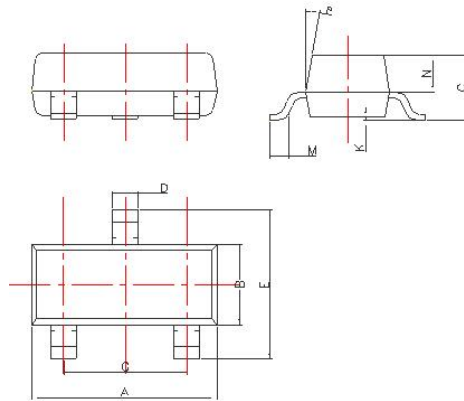
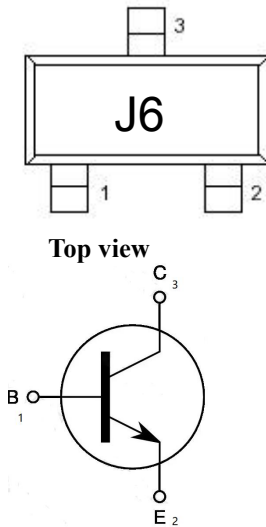


## CDT9014-ME

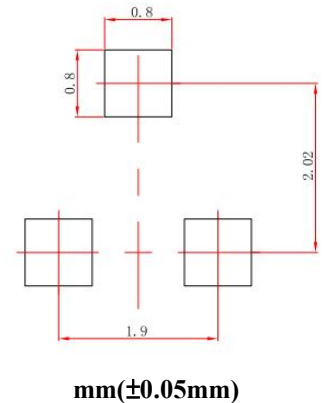
## TRANSISTOR

## Marking: J6

## SOT-23 Dimension

SOT-23  
Suggested Layout

DIM	Millimeters
A	2.85~3.04
B	1.30±0.10
C	1.00±0.10
D	0.45±0.05
E	2.25~2.55
G	1.90±0.1
K	0.00-0.10
M	0.20 min
N	0.60±0.10
P	7±2°



## MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V <sub>CEO</sub>	50	Vdc
Collector-Base Voltage	V <sub>CB0</sub>	45	Vdc
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	Vdc
Collector Current - Continuous	I <sub>C</sub>	150	mAdc
Base Current	I <sub>B</sub>	30	mAdc

## THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Collector Power Dissipation	P <sub>c</sub>	300	mW
Junction and Storage Temperature	T <sub>j</sub> , T <sub>stg</sub>	150 , -55 ~150	°C

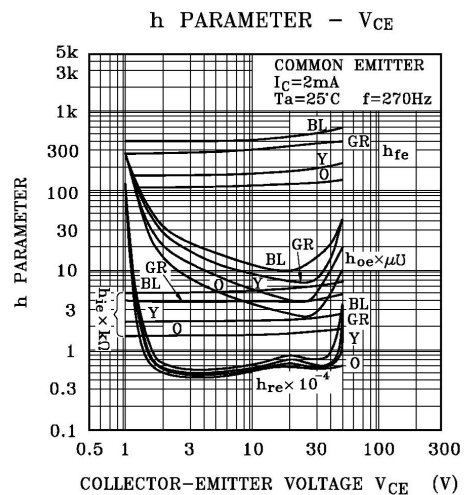
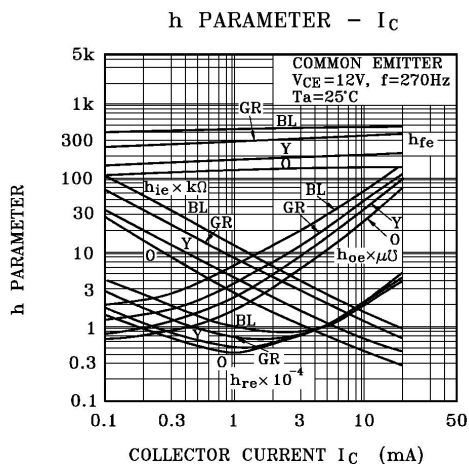
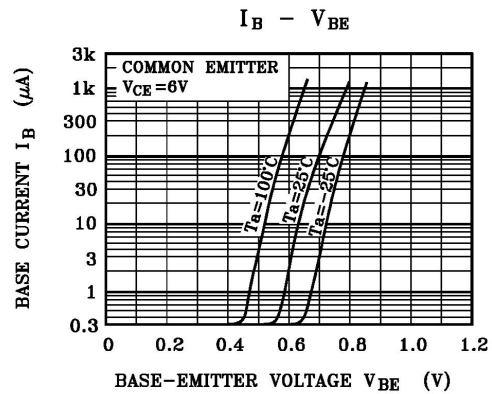
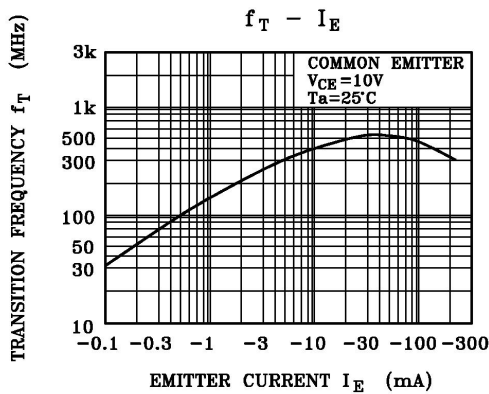
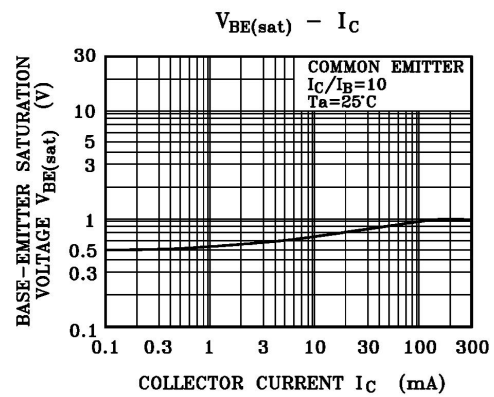
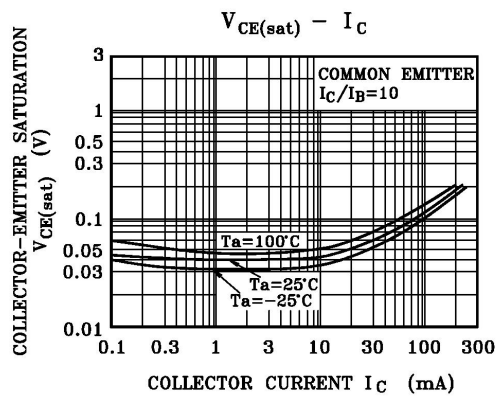
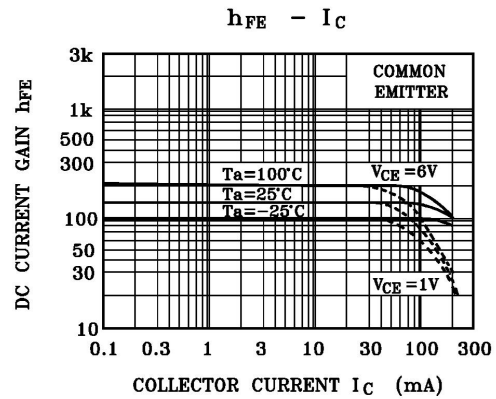
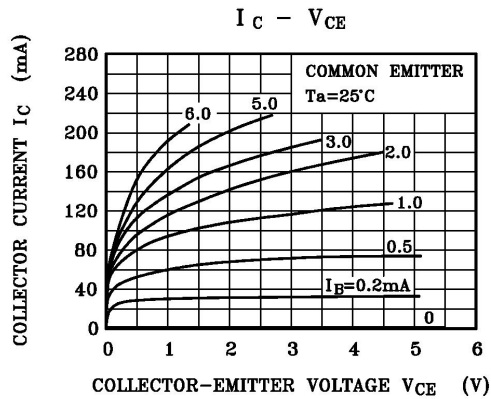
## ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

Characteristic	Symbol	Test Condition	Min	Type	Max	Unit
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0	--	--	0.1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0	--	--	0.1	μA
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA	50	--	--	V
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =1.0mA	45	--	--	V
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA	5	--	--	V
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =2mA	200	--	450	--
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =5mA	--	--	0.6	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10mA	--	--	0.82	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10mA	100	180	--	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz	--	4.0	7.0	pF

# CDT9014-ME

## TRANSISTOR

### Typical Performance Characteristics



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.