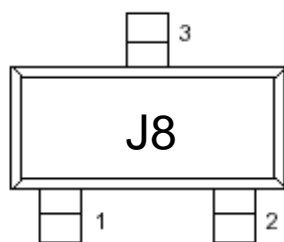


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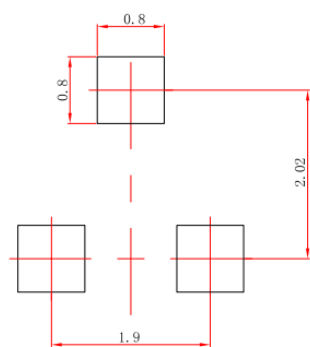
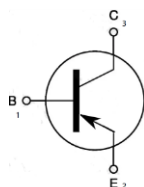
CDT9018-ME

TRANSISTOR

Marking: J8



Top view

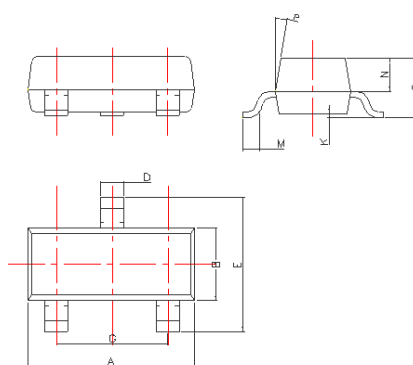


Suggested Layout

(±0.05mm)

SOT-23

Dimension



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_{CEO}	30	Vdc
Collector-Base Voltage	V_{CBO}	19	Vdc
Emitter-Base Voltage	V_{EBO}	5.0	Vdc
Collector Current - Continuous	I_C	50	mAdc
Base Current	I_B	50	mAdc

THERMAL CHARACTERISTICS

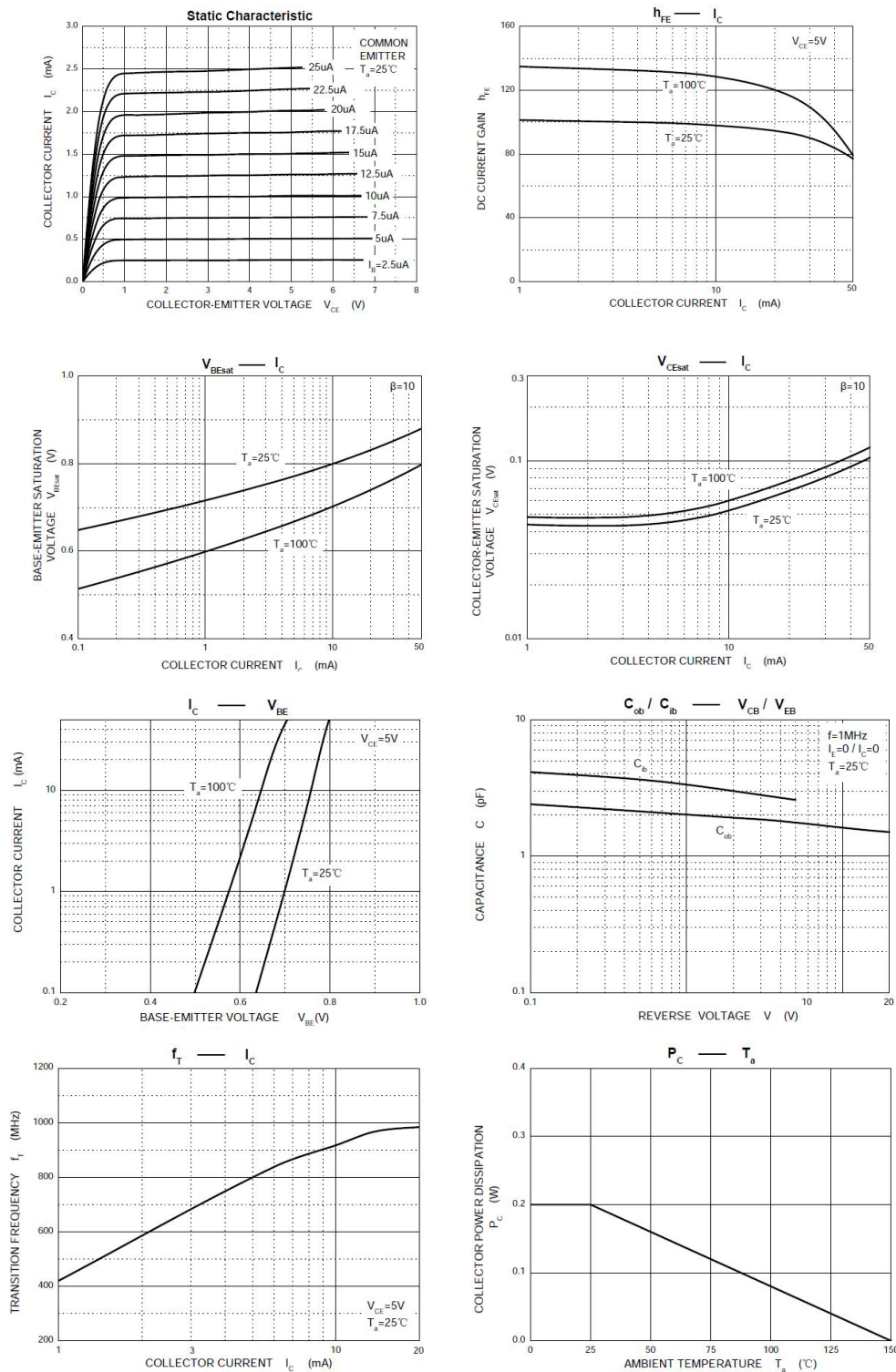
Characteristic	Symbol	Max	Unit
Collector Power Dissipation	P_c	300	mW
Junction and Storage Temperature	T_j , T_{stg}	150 -55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Characteristic	Symbol	Test Condition	Min	Type	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=20V, I_E=0$	--	--	0.5	µA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=3V, I_C=0$	--	--	0.5	µA
Collector- Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A$	30	--	--	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1.0mA$	19	--	--	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A$	4	--	--	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=1mA$	40	--	300	--
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$	--	--	0.6	V
Base Emitter Voltage	V_{BE}	$I_B=10mA$	--	--	1.0	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=10mA$	600	1100	--	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	--	1.2	1.5	pF

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Typical Performance Characteristics



Note: Specifications are subject to change without notice.