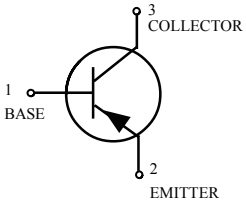
General Purpose Transistors

LOW FREQUENCY POWER AMPLIFIER APPLICATION.
POWER SWITCHING APPLICATION.

FEATURES

· High DC Current Gain : h_{FE}=100~320.
· Low Saturation Voltage
: $V_{CE(sat)}$=- 0.4V(Max.) (I_C=- 500mA, I_B=- 20mA).
· Suitable for Driver Stage of Small Motor.
· Complementary to FTC3265.
· Small Package.

SOT-23



MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector- Base Voltage	V_{CBO}	- 35	V
Collector- Emitter Voltage	V_{CEO}	- 30	V
Emitter- Base Voltage	V_{EBO}	- 5	V
Collector Current	I_C	- 800	mA
Base Current	I_B	- 160	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	- 55~ 150	℃

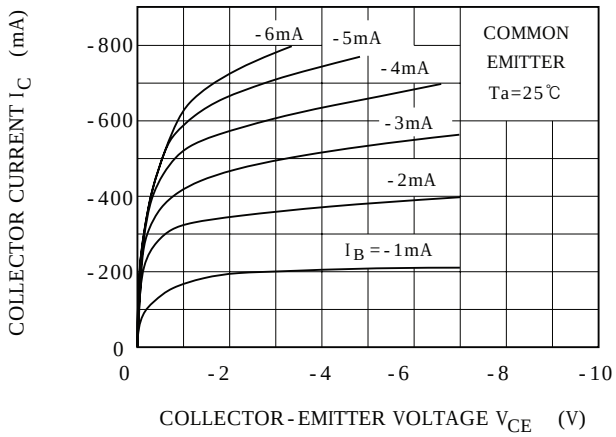
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut- off Current	I_{CBO}	V_{CB}=- 30V, I_E=0	-	-	- 100	nA
Emitter Cut- off Current	I_{EBO}	V_{EB}=- 5V, I_C=0	-	-	- 100	nA
Collector- Emitter Breakdown Voltage	$V_{(BR)CEO}$	V_{EB}=- 10mA, I_B=0	- 30	-	-	V
Emitter- Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=- 1mA, I_C=0	- 5	-	-	V
DC Current Gain	h_{FE}(1) (Note)	V_{CE}=- 1V, I_C=- 100mA	100	-	320	
	h_{FE}(2)	V_{CE}=- 1V, I_C=- 800mA	40	-	-	
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=- 500mA, I_B=- 20mA	-	-	- 0.5	V
Base- Emitter Voltage	V_{BE}	V_{CE}=- 1V, I_C=- 10mA	- 0.5	-	- 0.8	V
Transition Frequency	f_T	V_{CE}=- 5V, I_C=- 10mA, f=100MHz	-	120	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=- 10V, I_E=0, f=1MHz	-	13	-	pF

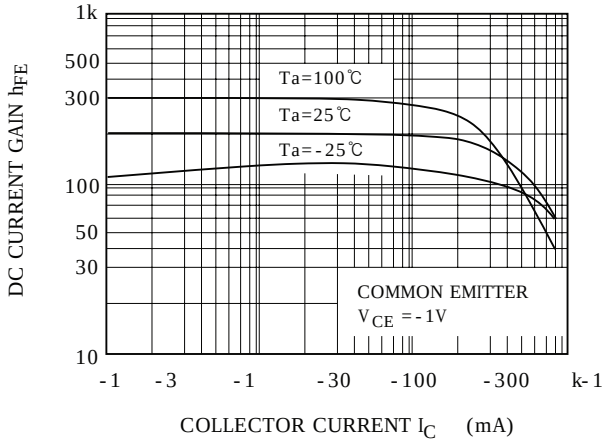
$h_{FE(1)}$ classifications、Marking:

$h_{FE(1)}$ Classifications	O	Y	
$h_{FE(1)}$ Range	100～200	160～320	
Marking	HIO	HIY	

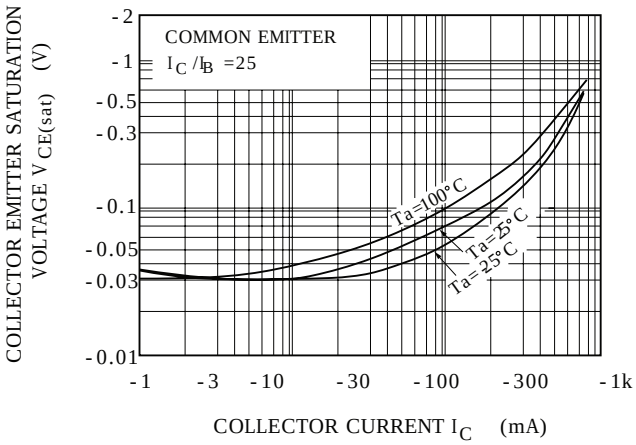
I_C - V_{CE}



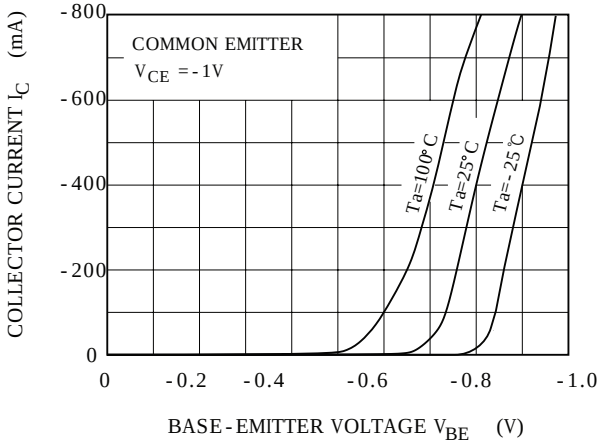
h_{FE} - I_C



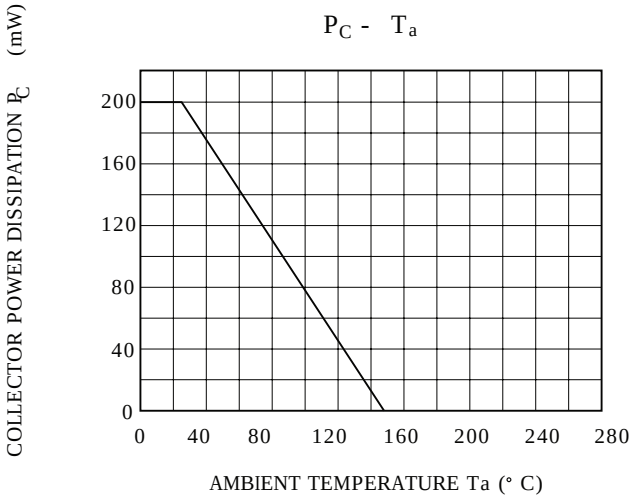
$V_{CE(sat)}$ - I_C



I_C - V_{BE}



P_C - T_a



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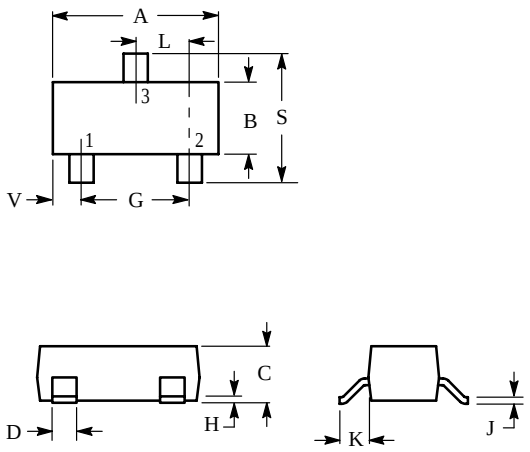

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M,1982
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60