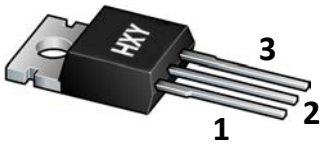
Features

- Medium Power Complementary Silicon Transistors



1.BASE
2.COLLECTOR
3.EMITTER

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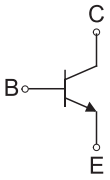


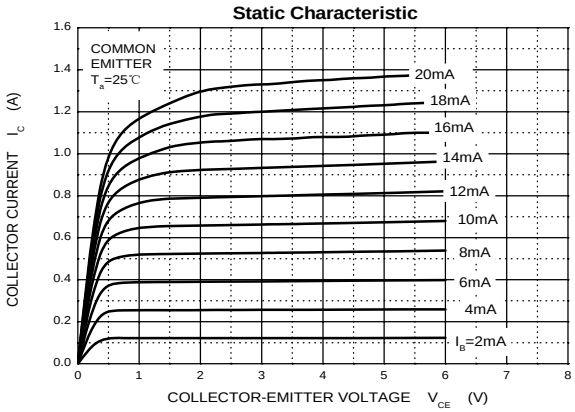
Maxmim Ratings (Ta=25℃unless otherwise noted)

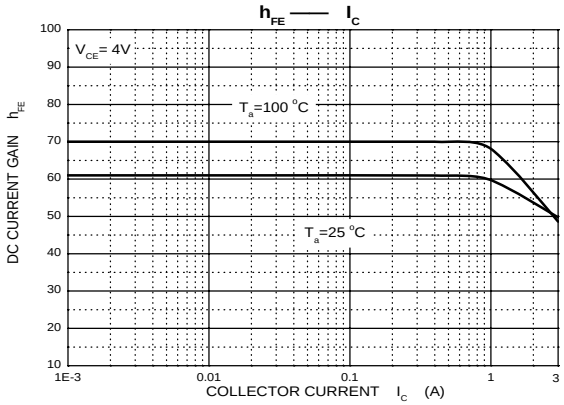
Symbol	Parameter	TIP41A	TIP41B	TIP41C	Unit
V_{CBO}	Collector-Base Voltage	60	80	100	V
V_{CEO}	Collector-Emitter Voltage	60	80	100	V
V_{EBO}	Emitter-Base Voltage	5			V
I_C	Collector Current -Continuous	3			A
P_C	Collector Power Dissipation	2			W
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	62.5			℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150			℃

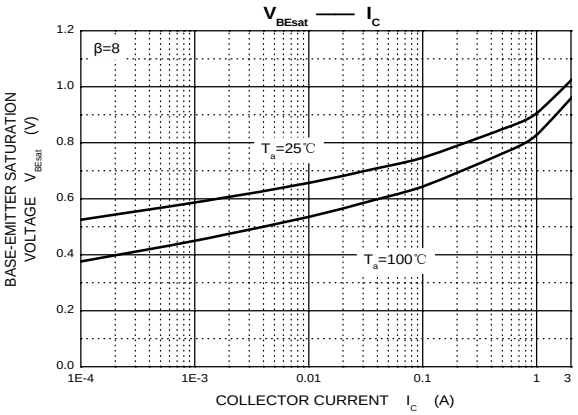
Electrcal Charcteristics (Ta=25℃unless otherwise specified)

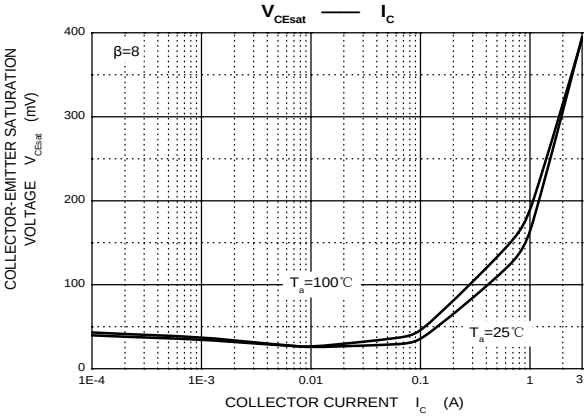
Parameter		Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	**TIP41**	$V_{(BR)CBO}$	I_C= 1mA, I_E=0	40		V
	TIP4 1A			60		
	TIP41B			80		
	TIP41C			100		
Collector-emitter breakdown voltage	**TIP41**	$V_{CEO(sus)}$	I_C= 30mA, I_B=0	40		V
	TIP41A			60		
	TIP41B			80		
	TIP41C			100		
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E= 1mA, I_C=0	5		V
Collector cut-off current	**TIP41**	I_{CBO}	V_{CB}=40V, I_E=0		0.3	mA
	TIP4 1A		V_{CB}=60V, I_E=0			
	TIP41B		V_{CB}=80V, I_E=0			
	TIP41C		V_{CB}=100V, I_E=0			
Collector cut-off current	**TIP41/41A**	I_{CEO}	V_{CE}= 30V, I_B= 0		0.7	mA
	TIP41B/41C		V_{CE}= 60V, I_B= 0			
Emitter cut-off current		I_{EBO}	V_{EB}=5V, I_C=0		1	mA
DC current gain		$h_{FE(1)}$	V_{CE}=4V, I_C= 1A	25		
		$h_{FE(2)}$	V_{CE}=4V , I_C= 3A	15	75	
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=3A, I_B=0.375A		1.2	V
Base-emitter voltage		$V_{BE(on)}$	V_{CE}= 4V, I_C=3A		1.8	V
Transition frequency		f_T	V_{CE}=10V , I_C=0.5A f =1MHz	3		MHz

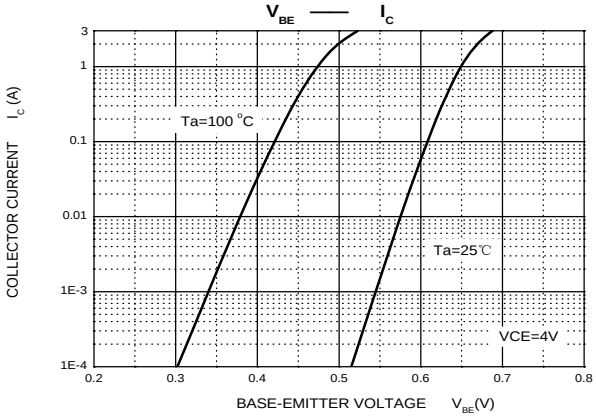
Typical Characteristics

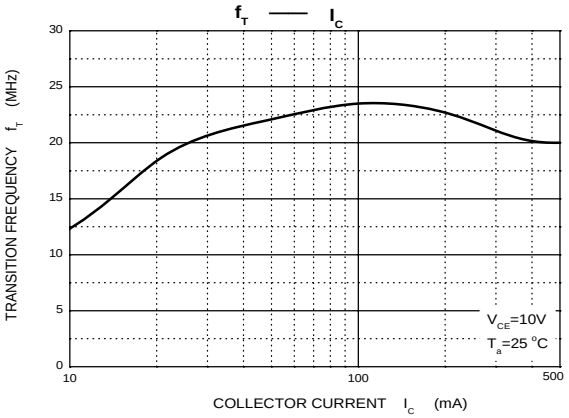


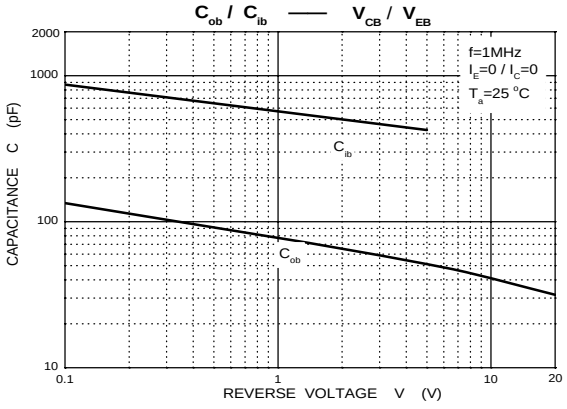


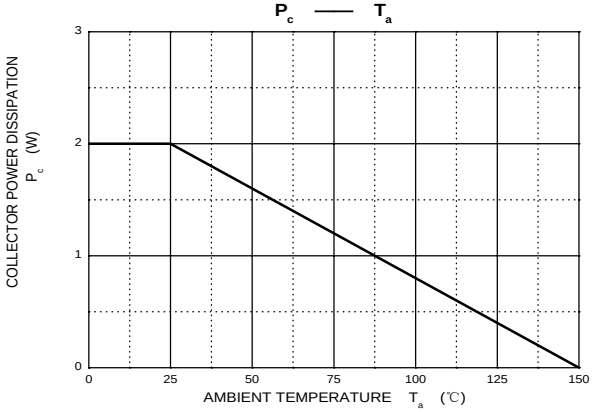












Package Information
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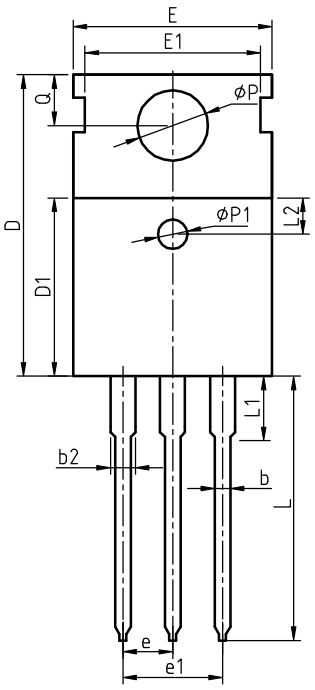

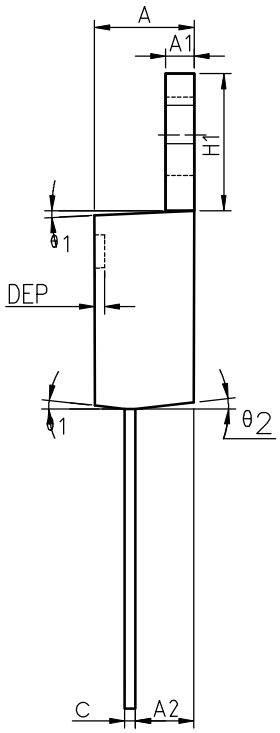

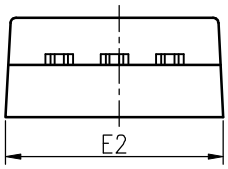

COMMON DIMENSIONS

SYMBOL	MIN	NOM	MAX	MIN	NOM	MAX
A	4.40	4.57	4.70	0.173	0.180	0.185
A1	1.27	1.30	1.33	0.050	0.051	0.052
A2	2.35	2.40	2.50	0.093	0.094	0.098
b	0.77	0.80	0.90	0.030	0.031	0.035
b2	1.17	1.27	1.36	0.046	0.050	0.054
c	0.48	0.50	0.56	0.019	0.020	0.022
D	15.40	15.60	15.80	0.606	0.614	0.622
D1	9.00	9.10	9.20	0.354	0.358	0.362
DEP	0.05	0.10	0.20	0.002	0.004	0.008
E	9.80	10.00	10.20	0.386	0.394	0.402
E1	-	8.70	-	-	0.343	-
E2	9.80	10.00	10.20	0.386	0.394	0.402
e		2.54	BSC		0.100	BSC
e1		5.08	BSC		0.200	BSC
H1	6.40	6.50	6.60	0.252	0.256	0.260
L	12.75	13.50	13.65	0.502	0.531	0.537
L1	-	3.10	3.30	-	0.122	0.130
L2		2.50	REF		0.098	REF
P	3.50	3.60	3.63	0.138	0.142	0.143
P1	3.50	3.60	3.63	0.138	0.142	0.143
Q	2.73	2.80	2.87	0.107	0.110	0.113
θ1	5°	7°	9°	5°	7°	9°
θ2	1°	3°	5°	1°	3°	5°
θ3	1°	3°	5°	1°	3°	5°

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