

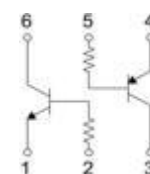
FEATURES

- DTA143T(PNP) and DTC143T(NPN) transistors are built-in a package.
- Transistor elements are independent, eliminating interference.
- Mounting cost and area can be cut in half.

SOT-363



MARKING:D6



Absolute maximum ratings(Ta=25℃)

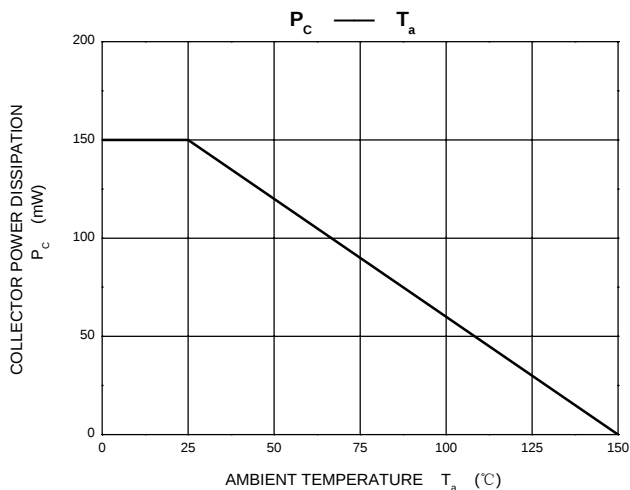
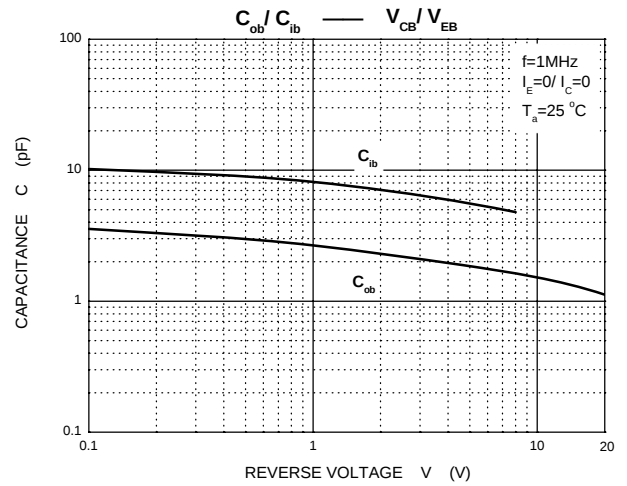
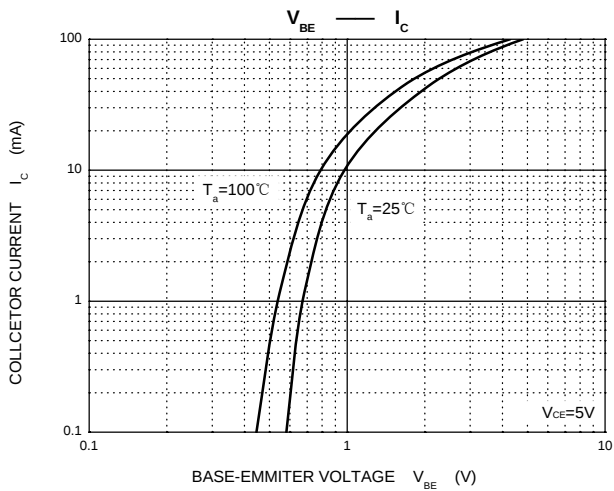
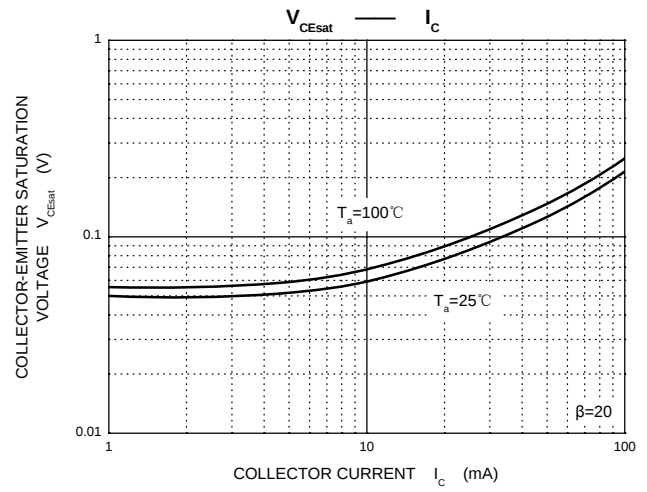
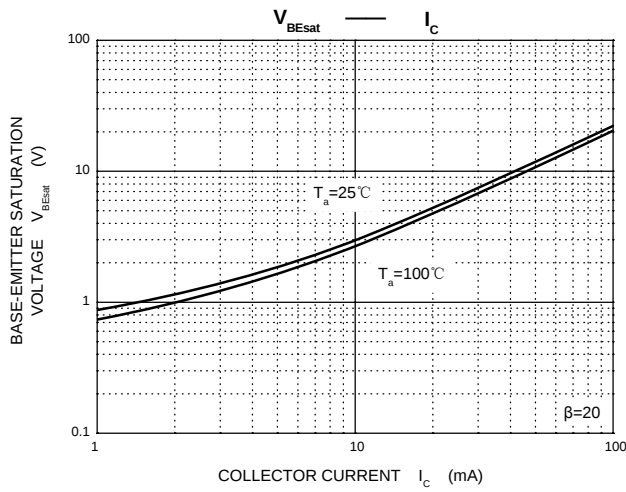
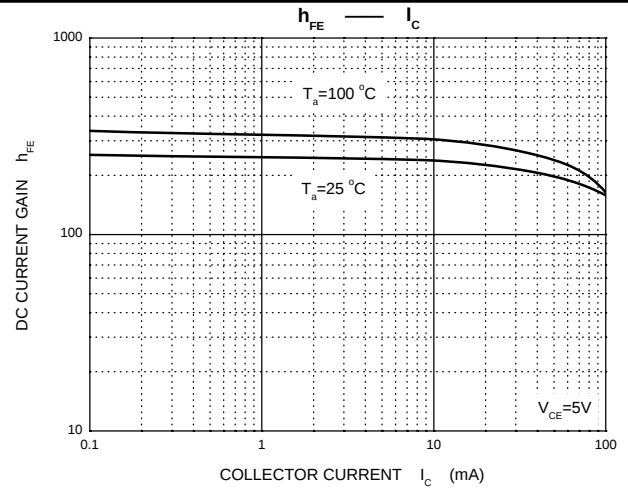
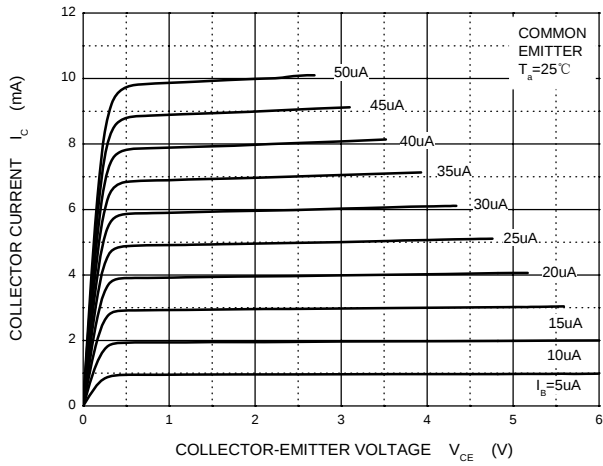
Parameter	Symbol	Limits	Unit
Collector-base voltage	$V_{(BR)CBO}$	50	V
Collector-emitter voltage	$V_{(BR)CEO}$	50	V
Emitter-base voltage	$V_{(BR)EBO}$	5	V
Collector current	I_C	100	mA
Collector Power dissipation	P_C	150	mW
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	℃

Electrical characteristics (Ta=25℃)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	50			V	$I_C=50\mu A$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	50			V	$I_C=1mA$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	5			V	$I_E=50\mu A$
Collector cut-off current	I_{CBO}			0.5	μA	$V_{CB}=50V$
Emitter cut-off current	I_{EBO}			0.5	μA	$V_{EB}=4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$			0.3	V	$I_C=5mA, I_B=0.25mA$
DC current transfer ratio	h_{FE}	100		600		$V_{CE}=5V, I_C=1mA$
Input resistance	R_1	3.29	4.7	6.11	K Ω	
Transition frequency	f_T		250		MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$

Typical Characteristics

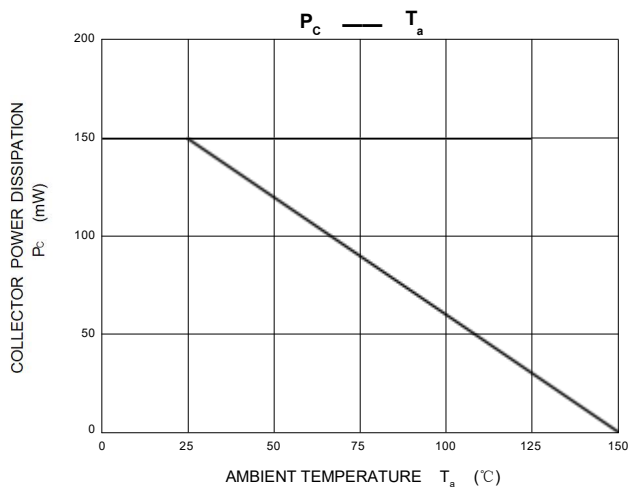
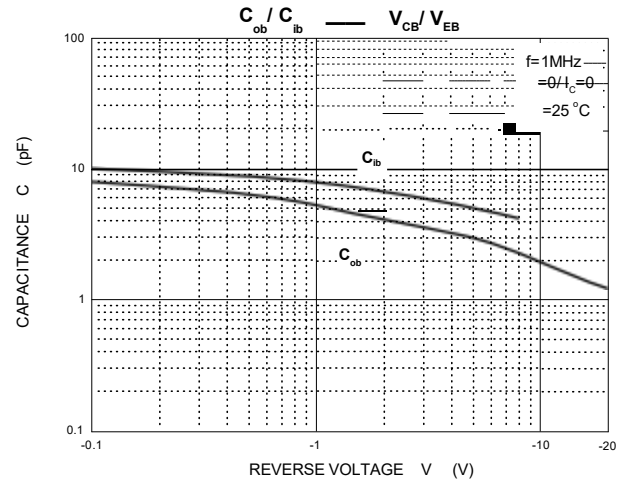
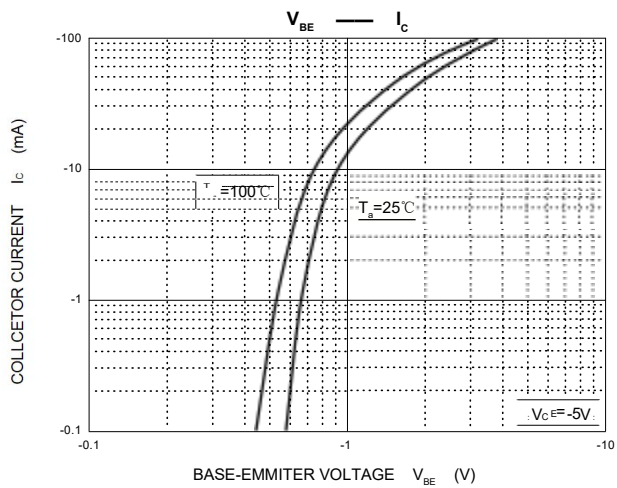
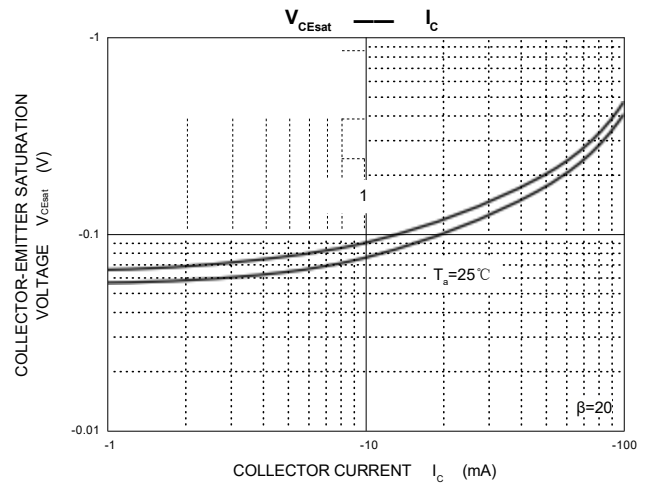
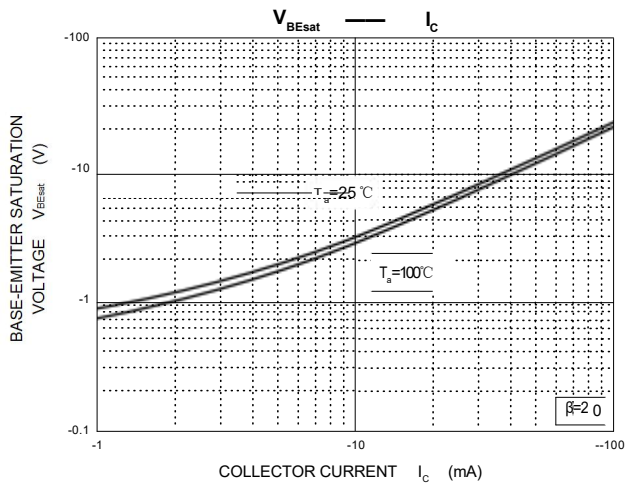
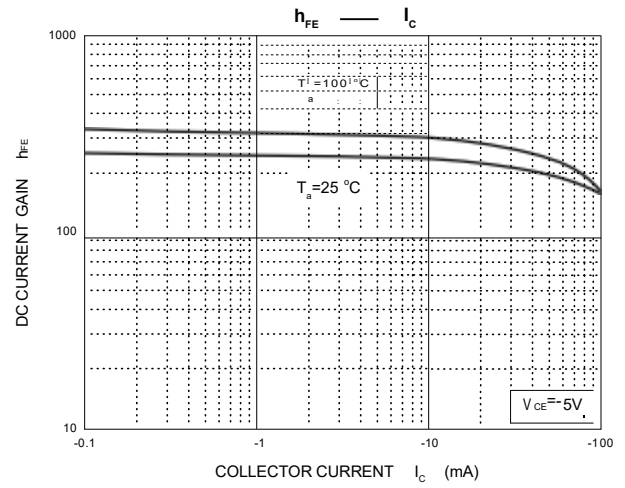
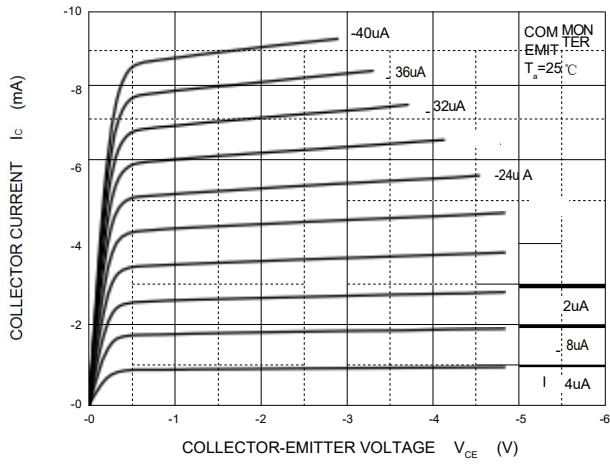
Static Characteristic



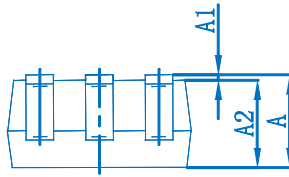
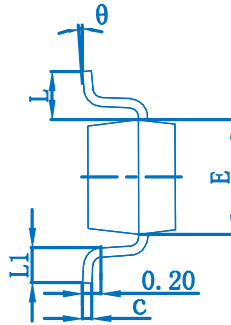
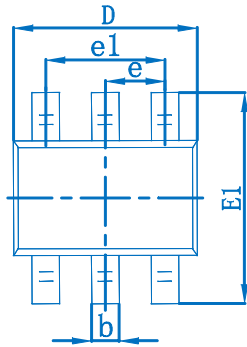
Typical Characteristics

DTA143T (PNP)

Static Characteristic

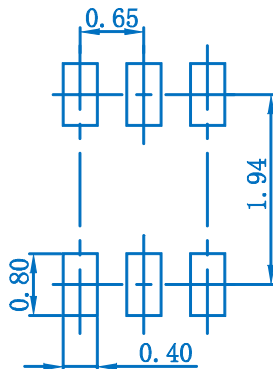


SOT-363 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-363 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.