

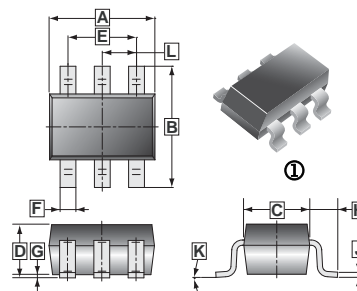
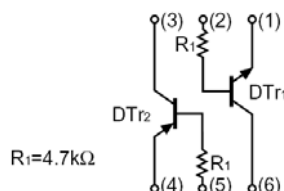
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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

EQUIVALENT CIRCUIT



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	G	0.100	REF.
B	2.15	2.45	H	0.525	REF.
C	1.15	1.35	J	0.08	0.15
D	0.90	1.10	K	8°	
E	1.20	1.40	L	0.650 TYP.	
F	0.15	0.35			

MARKING : D6

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Value	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
Junction & Storage temperature	T_J, T_{STG}	150, -55 ~ 150	°C

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS at Ta = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	50	-	-	V	$I_C = 50\mu A$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	50	-	-		$I_C = 1mA$
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	$K\Omega$	
Transition frequency	f_T	-	250	-	MHz	$V_{CE} = 10V, I_E = -5mA, f = 100MHz$

CHARACTERISTICS CURVE

DTr1 (NPN)

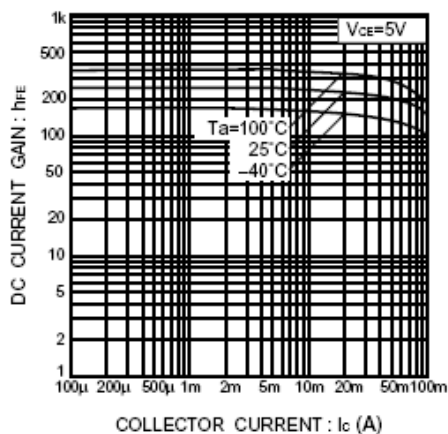


Fig.1 DC current gain vs. collector current

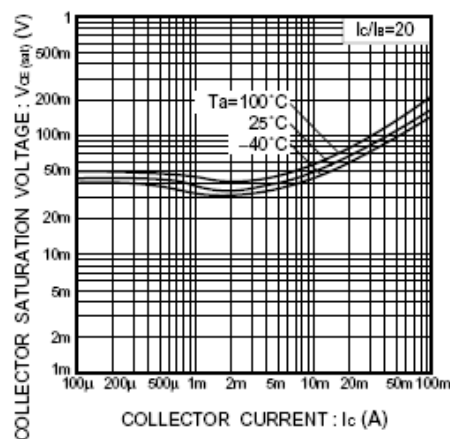


Fig.2 Collector-emitter saturation voltage vs. collector current

DTr2 (PNP)

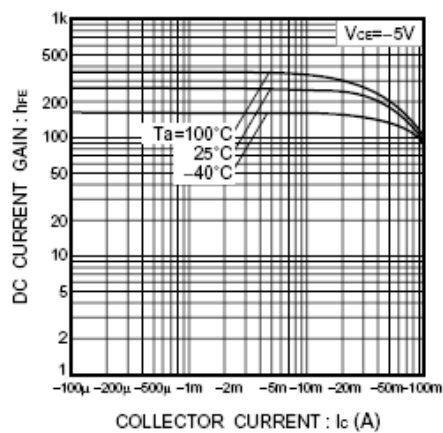


Fig.3 DC current gain vs. collector current

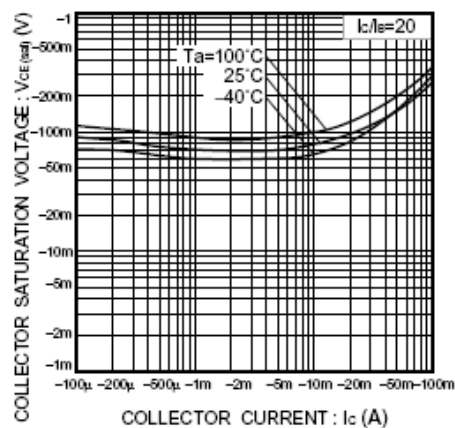


Fig.4 Collector-emitter saturation voltage vs. collector current