

**Features**

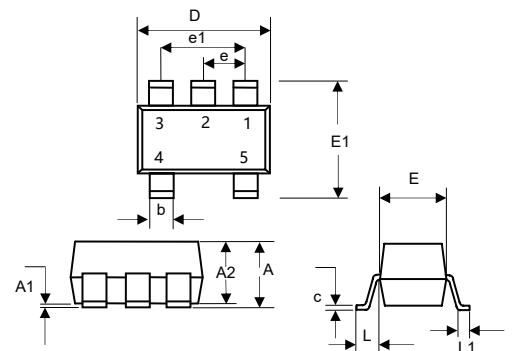
- Two DTC143T Chips In a Package
- Mounting Cost and Area Can Be Cut In Half.
- Transistor Elements Independent, Eliminating Interference.
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

**Maximum Ratings @ 25°C Unless Otherwise Specified**

Parameter	Symbol	Min	Typ	Max	Unit
Collector-Emitter Voltage	$V_{CEO}$	50	---	---	V
Collector-Base Voltage	$V_{CBO}$	50	---	---	V
Emitter-Base Voltage	$V_{EBO}$	5	---	---	mV
Collector Current	$I_C$	---	100	---	mA
Power Dissipation	$P_D$	---	150	---	mW
Junction Temperature	$T_J$	---	150	---	°C
Storage Temperature Range	$T_{STG}$	-55	---	150	°C

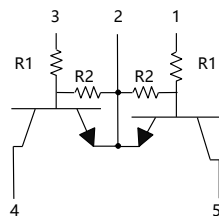
**Dual NPN  
Digital Transistor**

**SOT-353**



**Device Marking: G3**

**Internal Structure**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.035	0.043	0.90	1.10	
A1	----	0.004	----	0.10	
A2	0.035	0.039	0.90	1.00	
b	0.006	0.014	0.15	0.35	
c	0.003	0.006	0.08	0.15	
D	0.790	0.087	2.00	2.20	
E	0.045	0.053	1.15	1.35	
E1	0.085	0.096	2.15	2.45	
e	0.026		0.650		TYP.
e1	0.047	0.055	1.20	1.40	
L	0.021		0.525		TYP.
L1	0.010	0.018	0.26	0.46	

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	50	---	---	V	$I_C=50\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	50	---	---	V	$I_C=1mA, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	---	---	V	$I_E=50\mu A, I_C=0$
Collector Cut-off Current	$I_{CBO}$	---	---	0.5	$\mu A$	$V_{CB}=50V, I_E=0$
Emitter Cut-off Current	$I_{EBO}$	---	---	0.5	$\mu A$	$V_{EB}=4V, I_C=0$
DC Current Transfer Ratio	$h_{FE}$	100	---	600	---	$I_C=1mA, V_{CE}=5V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	---	---	0.3	V	$I_C=5mA, I_B=0.25mA$
Input Resistance	$R_1$	3.29	4.7	6.11	K $\Omega$	
Transition Frequency	$f_T$	---	250	---	MHz	$V_{CE}=10.0V, I_E=-5mA, f=100MHz$

## Curve Characteristics

Fig. 1 - Static Characteristics

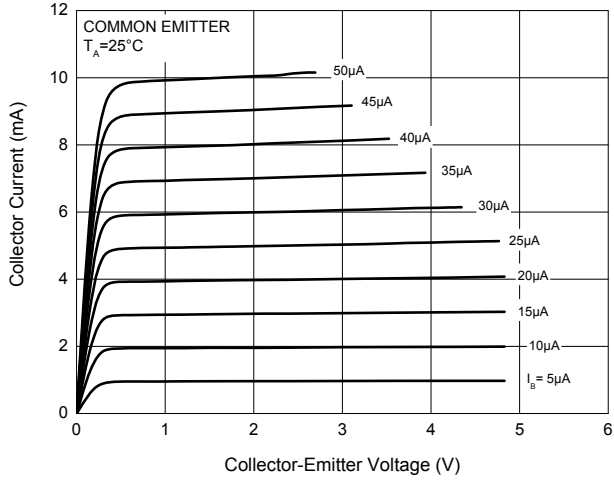


Fig. 2 - DC Current Gain Characteristics

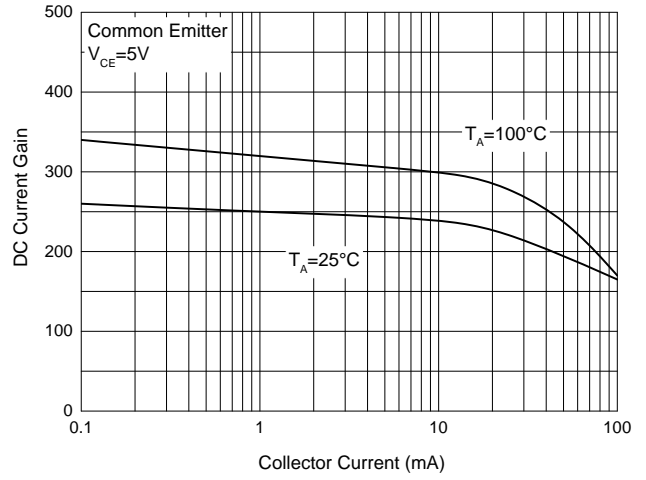


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

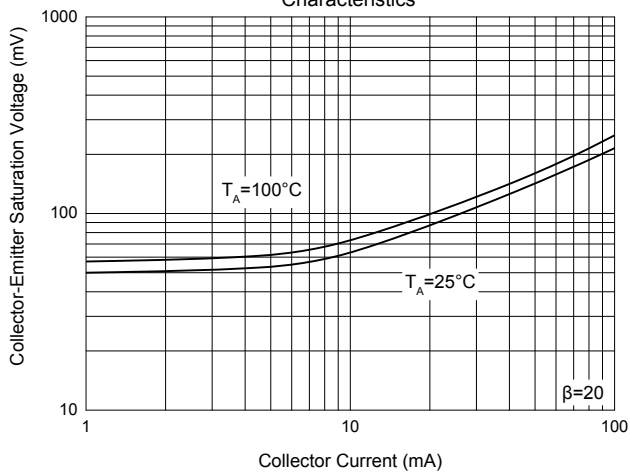
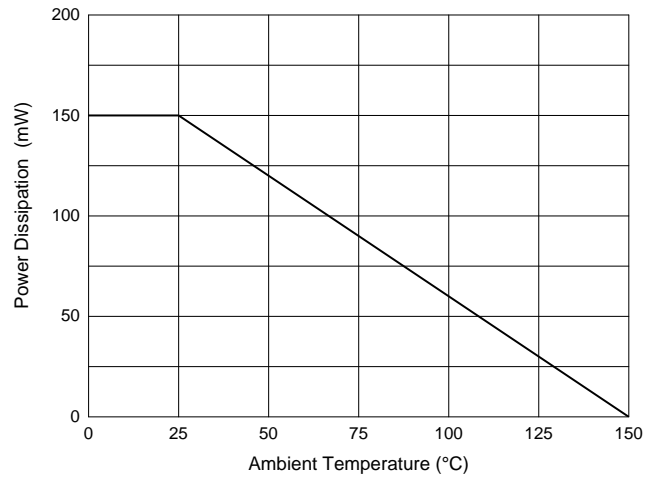


Fig. 5 - Power Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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