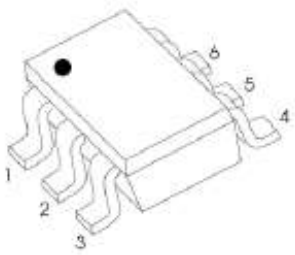
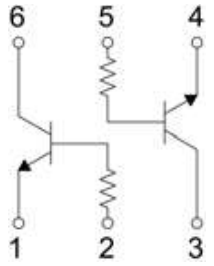
1. Features

- Two DTC143T chips in a package
- Transistor elements are independent, eliminating interference
- Mounting cost and area can be cut in half

2. Mechanical Data

- SOT-363 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any
- Marking: H3

3. Pin configuration

Pin	Function	Outline	Circuit Diagram
1	Emitter1		
2	Base1		
6	Collector1		
4	Emitter2		
5	Base2		
3	Collector2		

4. Specification

Absolute Maximum Rating & Thermal Characteristics

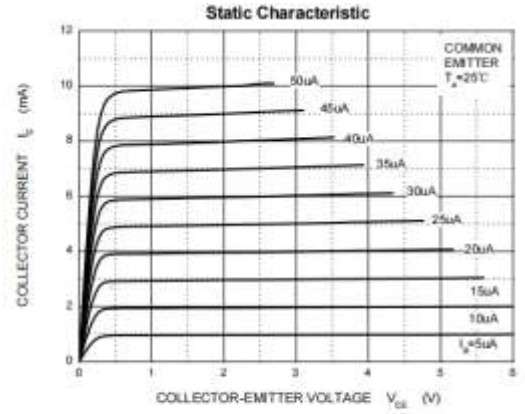
Ratings at 25 ˚C ambient temperature unless otherwise specified.

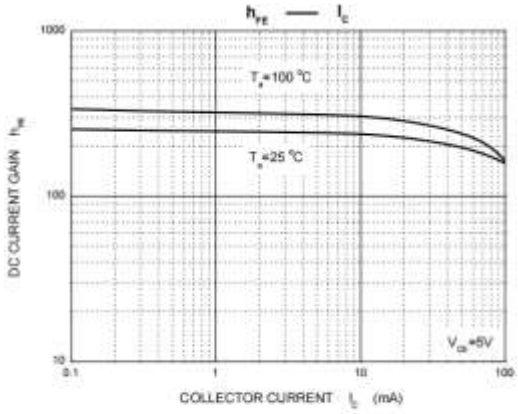
Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter -Base Voltage	V_{EBO}	5	V
Collector Current-Continuous	I_C	100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55-+150	℃

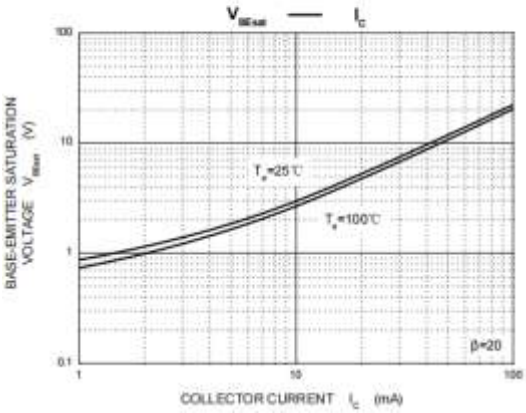
Electrical Characteristics(At TA = 25℃ unless otherwise specified)

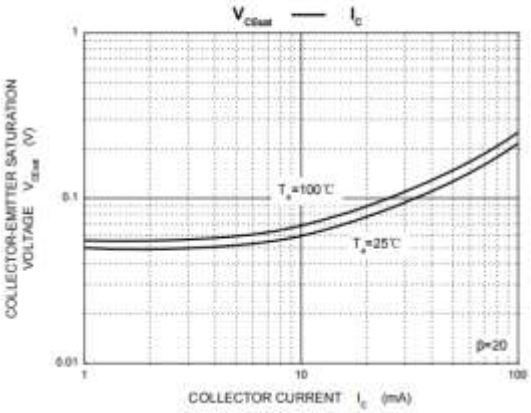
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=50uA	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=50uA	5			V
Collector cut-off current	I_{CBO}	V_{CB}=50V			0.5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

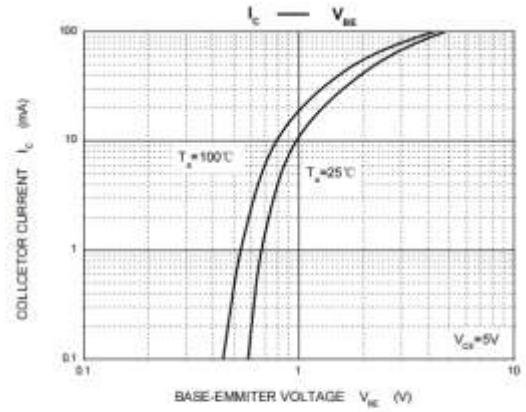
5. Typical characteristics

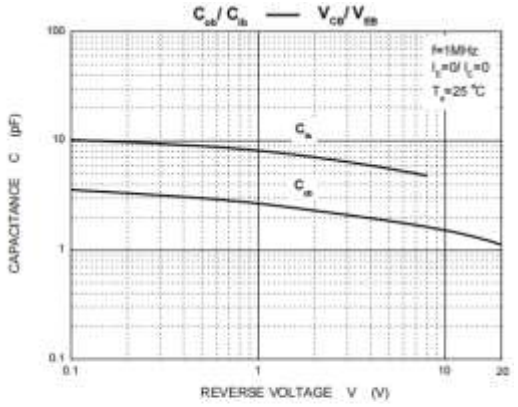


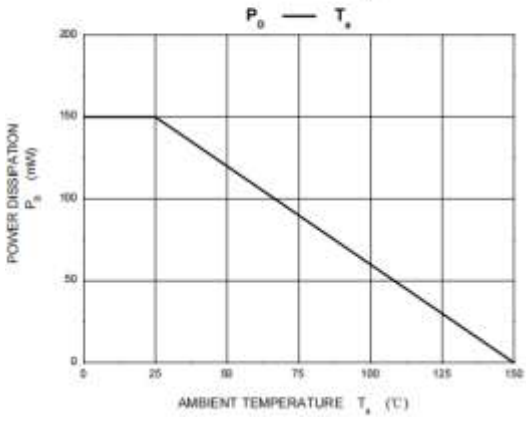




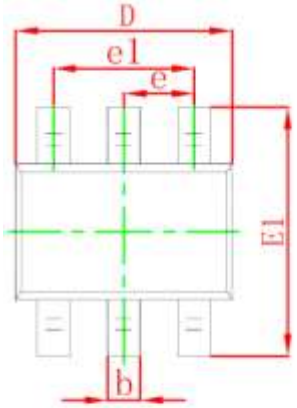


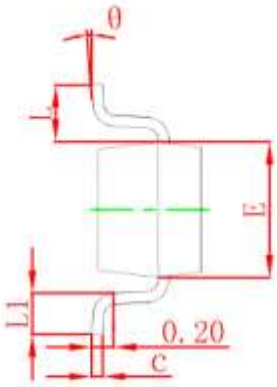


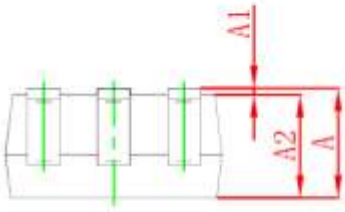




6. Dimension (SOT-363)

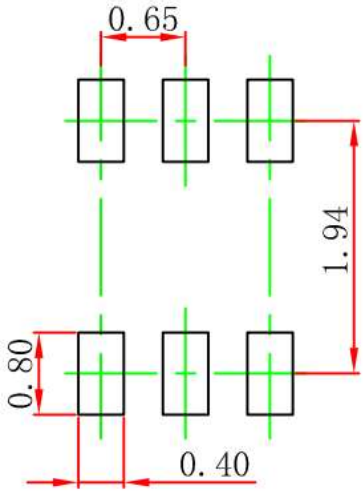






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 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°

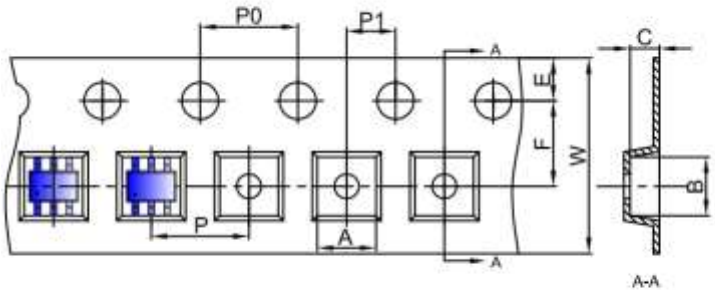
SOT-363 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

7. Tape and Reel (SOT-363)

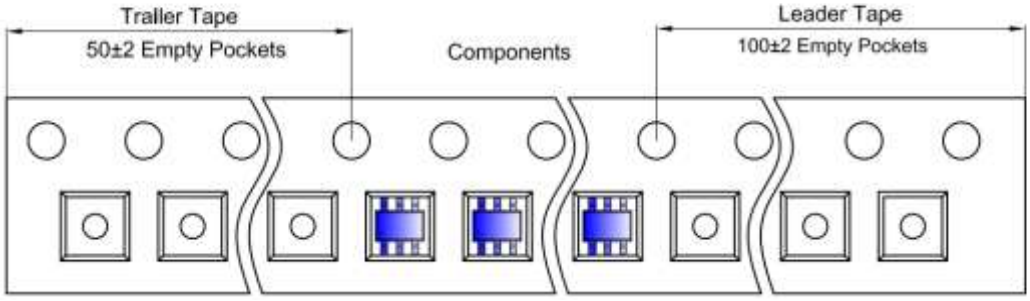
SOT-363 Embossed Carrier Tape



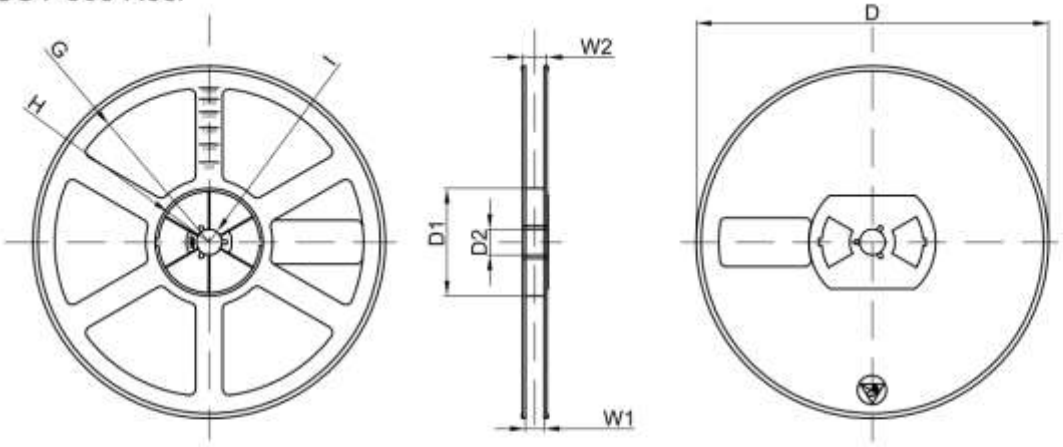
Packaging Description:
SOT-363 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-363 Tape Leader and Trailer



SOT-363 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

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