



TSA1036D

General Purpose Dual PNP Transistor

SOT-363



Pin assignment:

- | | |
|----------------|----------------|
| 1. Emitter 1 | 6. Collector 1 |
| 2. Base 1 | 5. Base 2 |
| 3. Collector 2 | 4. Emitter 2 |

$BV_{CEO} = -32V$

$I_C = -500mA$

$V_{CE(SAT)} = 0.4V(\text{typ.}) @ I_C / I_B = 300mA / 30mA$

Features

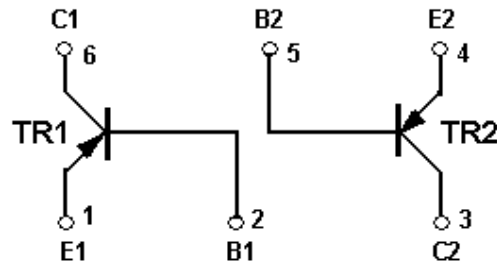
- Two TSA1036 chips in a SOT-363 package
- Transistor elements are independent, eliminating interference
- Optimal for low voltage operation

Structure

- Epitaxial planar type.
- Mounting possible with SOT-323 automatic mounting machines.
- Complementary to TSC2411DCU6

Ordering Information

Part No.	Packing	Package	Marking
TSA1036DCU6	3kpcs / reel	SOT-363	1PR



Absolute Maximum Rating (Ta = 25 °C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V_{CBO}	- 40V	V
Collector-Emitter Voltage	V_{CEO}	- 32V	V
Emitter-Base Voltage	V_{EBO}	- 5	V
Collector Current	I_C	- 0.5	A
Collector Power Dissipation (note)	P_D	200 (total)	mW
Operating Junction Temperature	T_J	+150	°C
Operating Junction and Storage Temperature Range	T_{STG}	- 55 to +150	°C

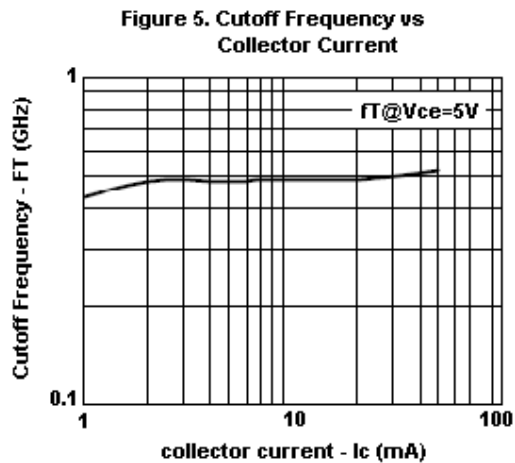
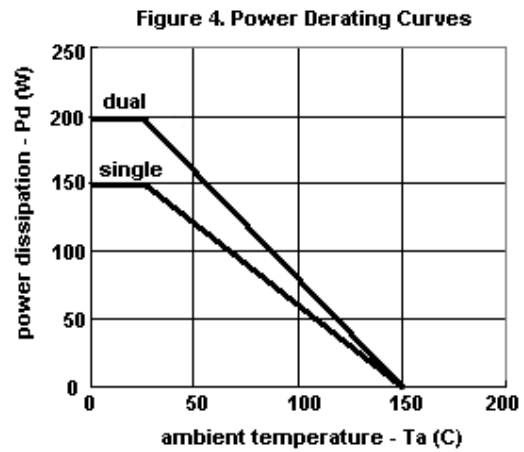
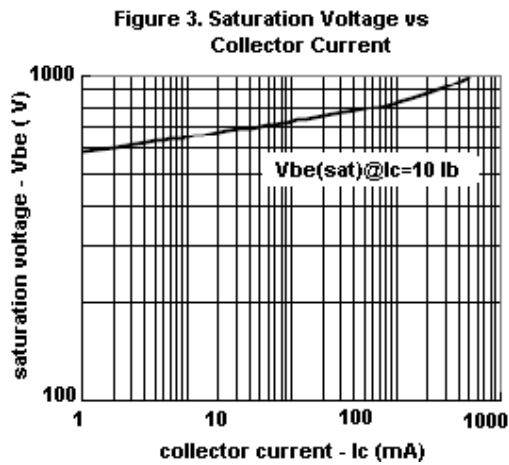
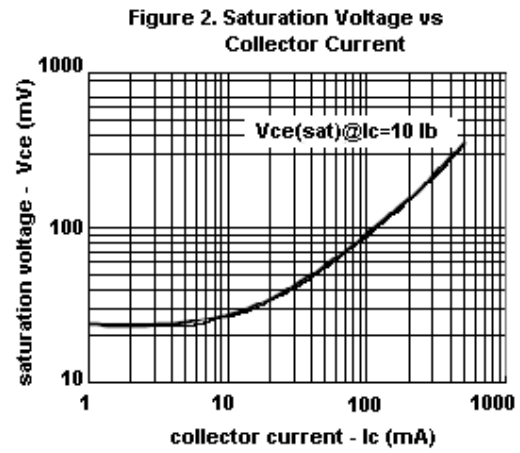
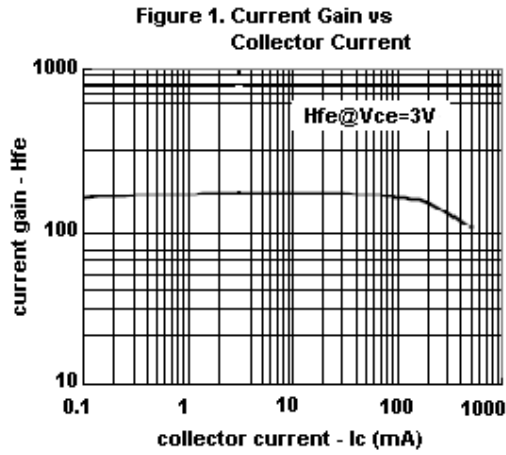
Note: 1. 150mW per element must not be exceeded.

Electrical Characteristics (Ta = 25 °C unless otherwise noted)

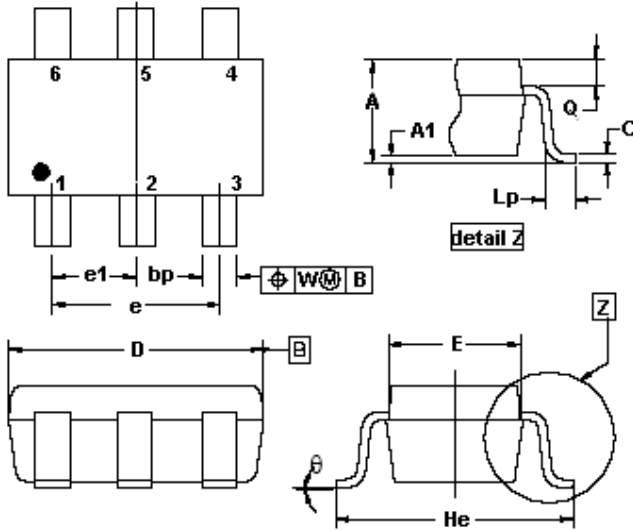
Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Collector-Base Voltage	$I_C = -100\mu A, I_E = 0$	BV_{CBO}	- 40	--	--	V
Collector-Emitter Breakdown Voltage	$I_C = -1mA, I_B = 0$	BV_{CEO}	- 32	--	--	V
Emitter-Base Breakdown Voltage	$I_E = -100\mu A, I_C = 0$	BV_{EBO}	- 6	--	--	V
Collector Cutoff Current	$V_{CB} = -20V, I_E = 0$	I_{CBO}	--	--	- 0.5	μA
Emitter Cutoff Current	$V_{EB} = -4V, I_C = 0$	I_{EBO}	--	--	- 0.5	μA
Collector-Emitter Saturation Voltage	$I_C / I_B = -100mA / -10mA$	$V_{CE(SAT)1}$	--	--	- 0.4	V
Collector-Emitter Saturation Voltage	$I_C / I_B = -300mA / -30mA$	$V_{CE(SAT)2}$	--	- 0.40	- 0.75	V
DC Current Transfer Ratio	$V_{CE} = -3V, I_C = 100mA$	h_{FE}	120	--	390	
Transition Frequency	$V_{CE} = -10V, I_C = -1mA, f=100MHz$	f_T	--	180	--	MHz
Output Capacitance	$V_{CB} = -10V, f=1MHz$	C_{ob}	--	2	--	pF

Note : pulse test: pulse width $\leq 380\mu s$, duty cycle $\leq 2\%$

Electrical Characteristics Curve



SOT-363 Mechanical Drawing



SOT-363 DIMENSION				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.80	1.10	0.031	0.043
A1	--	0.10	--	0.004
bp	0.10	0.30	0.004	0.012
C	0.10	0.25	0.004	0.010
D	1.80	2.20	0.071	0.087
E	1.15	1.35	0.045	0.053
e	1.30 (typ)		0.052 (typ)	
e1	0.65 (typ)		0.026 (typ)	
He	2.00	2.20	0.079	0.087
Lp	0.10	0.3	0.004	0.012
Q	0.20 (typ)		0.008 (typ)	
W	0.20 (typ)		0.008 (typ)	
Θ	10° (typ)		10° (typ)	