TECH PUBLIC
台舟电子

TPIMT17

Plastic-Encapsulate TRANSISTOR

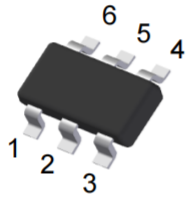
www.sot23.com.tw

Features

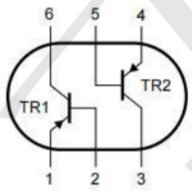
- High current (500mA)
- Replaces two SOT23 packaged transistors on same PCB area.
- Transistor elements are independent, eliminating interference.
- Mounting cost, and area, are reduced by one half.

Package and Pin Configuration

SOT23-6



Circuit diagram



Marking:T17

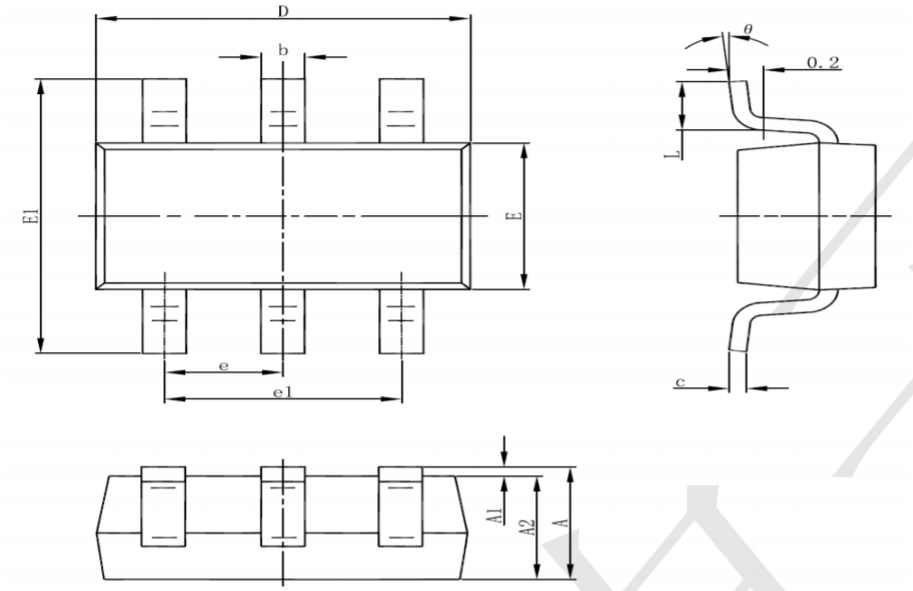
Absolute Maximum Ratings (T_A=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-0.6	A
Power Dissipation	P_C	300 (Total)	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-50 to +150	°C

Electrical Characteristics (T_A=25°C, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,IE=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,IB=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,IC=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V,I_B=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V,I_C=0			-100	nA
DC current gain	h_{FE}	V_{CE}=-3V,I_C=-100mA	120		390	
Collector-emitter saturation voltage	V_{CESAT}	I_C=-500mA,I_B=-50mA			-0.6	V
Base-emitter saturation voltage	V_{BESAT}	I_C=-500mA,I_B=-20mA			-1.2	V
Transition frequency	f_T	V_{CE}=−5V;I_C=−10mA;f=100MHz		250		MHz

SOT23-6 Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°