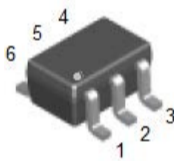


Features

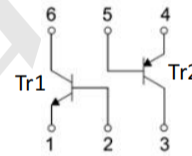
- Both a 2SA2018 chip and 2SC5585 chip in a SOT-363 package.
- Replaces two SOT-323 packaged transistors on same PCB area.
- Transistor elements are independent, eliminating interference.
- Mounting cost, and area, are reduced by one half.

Package and Pin Configuration



SOT363

Circuit diagram



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value		Unit
		Tr1	Tr2	
Collector-Base Voltage	V_{CBO}	15	-15	
Collector-Emitter Voltage	V_{CEO}	12	-12	V
Emitter-Base Voltage	V_{EBO}	6	-6	V
Collector Current -Continuous	I_C	0.5	-0.5	A
Power Dissipation	P_C	150 (Total)		mW
Junction temperature	T_j	150		$^{\circ}\text{C}$
Storage temperature	T_{stg}	-50 to +150		$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Tr1 NPN

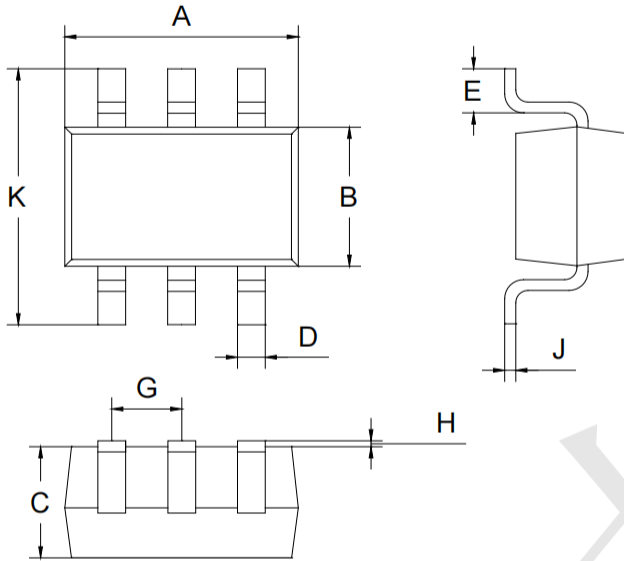
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=15\text{V}, I_B=0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=6\text{V}, I_C=0$			100	nA
DC current gain	h_{FE}	$V_{CE}=2\text{V}, I_C=10\text{mA}$	270		680	
Collector-emitter saturation voltage	V_{CESAT}	$I_C=200\text{mA}, I_B=10\text{mA}$			0.25	V
Base-emitter saturation voltage	V_{BESAT}	$I_C=200\text{mA}, I_B=10\text{mA}$			1.0	V

Tr2 PNP

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}, I_E=0$	-15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB}=-15\text{V}, I_B=0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-6\text{V}, I_C=0$			-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE}=-2\text{V}, I_C=-10\text{mA}$	270		680	
Collector-emitter saturation voltage	V_{CESAT}	$I_C=-200\text{mA}, I_B=-10\text{mA}$			-0.25	V
Base-emitter saturation voltage	V_{BESAT}	$I_C=-200\text{mA}, I_B=-10\text{mA}$			-1.0	V



Outline Drawing - SOT363 (unit: mm)



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout-SOT363 (unit: mm)

