

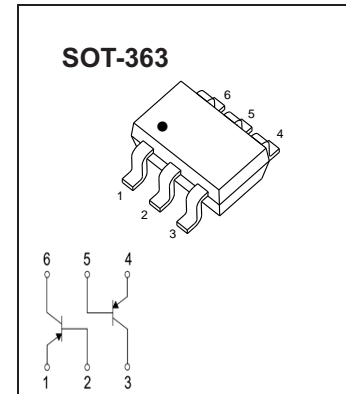
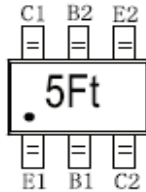
SOT-363 Plastic-Encapsulate Transistors

DUAL TRANSISTOR (PNP+PNP)

FEATURES

- Two transistors in one package
- Reduces number of components and board space
- No mutual interference between the transistors
- AEC-Q101 qualified (Automotive grade with suffix "Q")
- Exsemi technology

MRKING



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

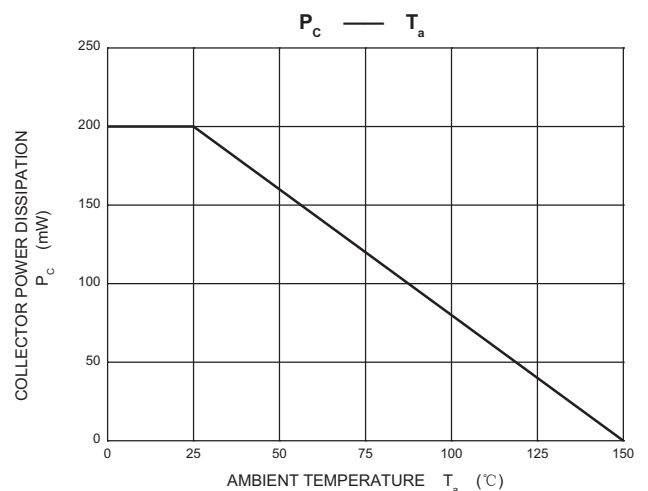
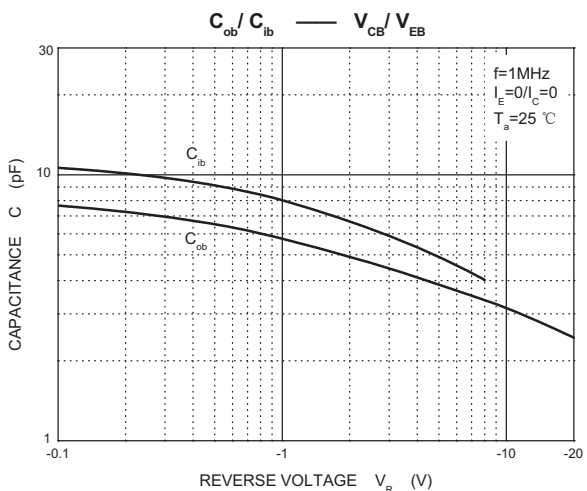
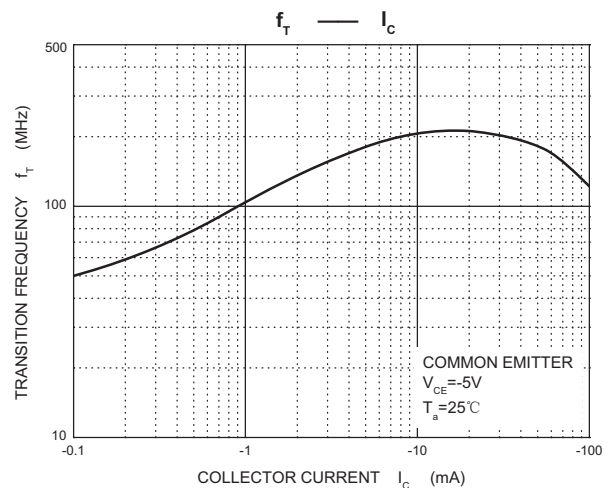
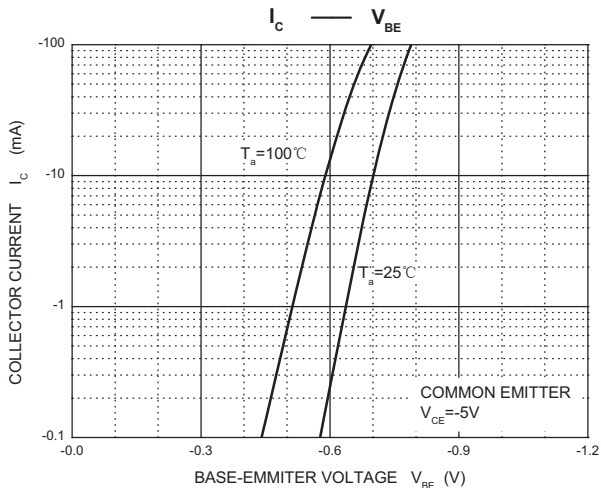
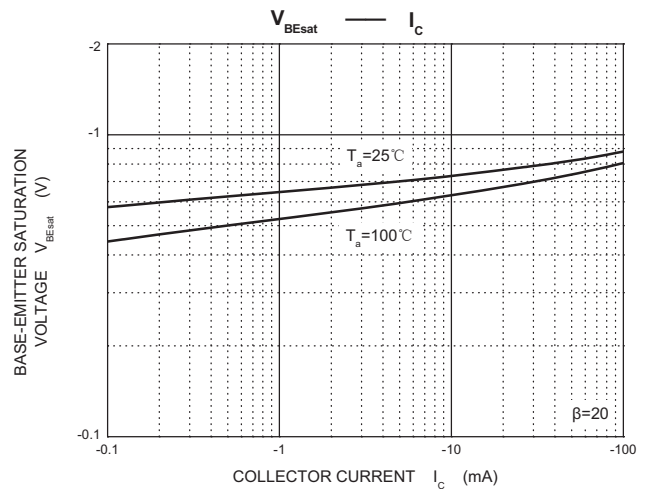
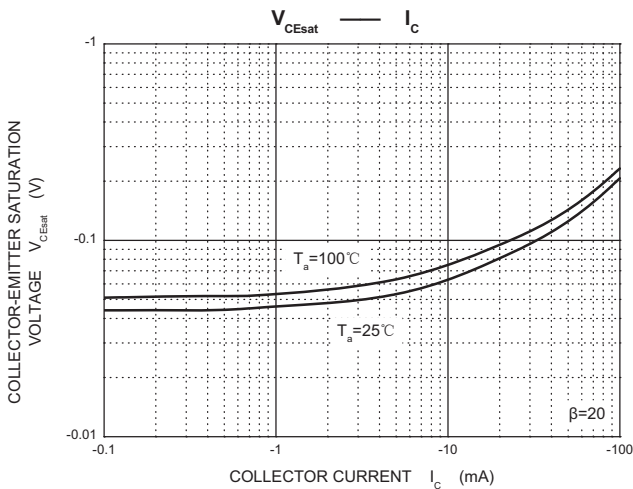
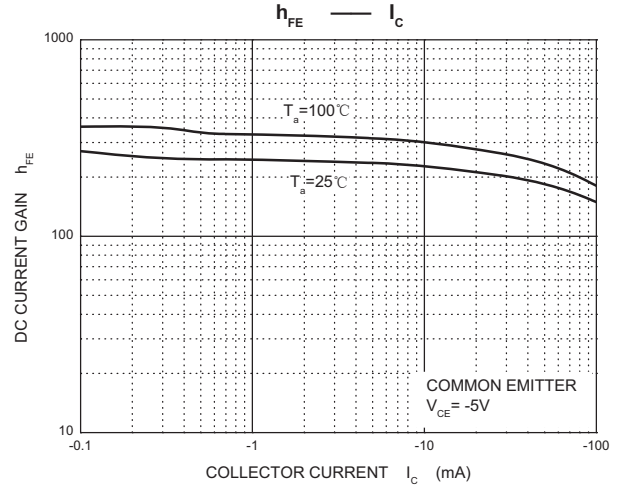
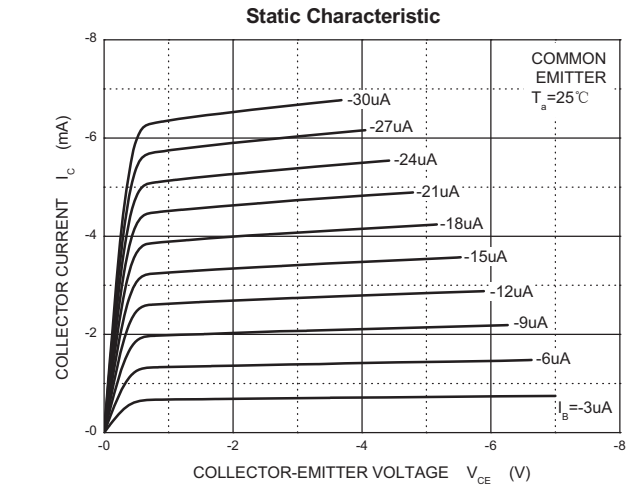
Symbol	Parameter	Value	Units
V_{CB0}	Collector- Base Voltage	-80	V
V_{CE0}	Collector-Emitter Voltage	-65	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.1	A
P_C	Collector Power Dissipation	0.2	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	$^\circ\text{C}/\text{W}$
T_J, T_{STG}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS PNP 5401 ($T_a=25^\circ\text{C}$ unless otherwise specified)

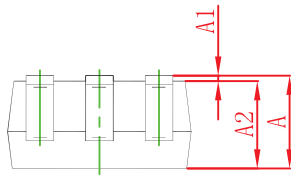
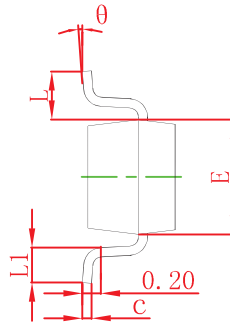
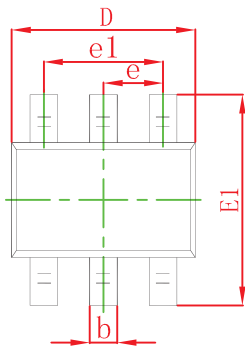
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}, I_E=0$	-80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-65			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-30\text{V}, I_E=0$			-15	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
DC current gain	h_{FE}	$V_{CE}=-5\text{V}, I_C=-2\text{mA}$	110			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-10\text{mA}, I_B=-0.5\text{mA}$			-0.1	V
		$I_C=-100\text{mA}, I_B=-5\text{mA}^*$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-10\text{mA}, I_B=-0.5\text{mA}$		0.7		V
Output Capacitance	C_{obo}	$V_{CB}=-10\text{V}, f=1\text{MHz}, I_E=0$			2.5	pF
Current Gain-Bandwidth Product	f_T	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=100\text{MHz}$	100			MHz

*pulse test: $PW \leq 350\mu\text{s}$, $\delta \leq 2\%$.

Typical Characteristics

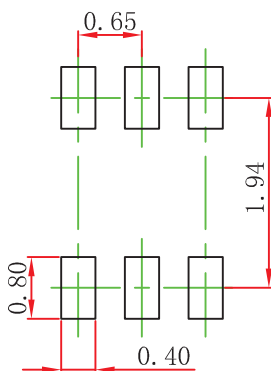


SOT-363 Package Outline Dimensions



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: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.