

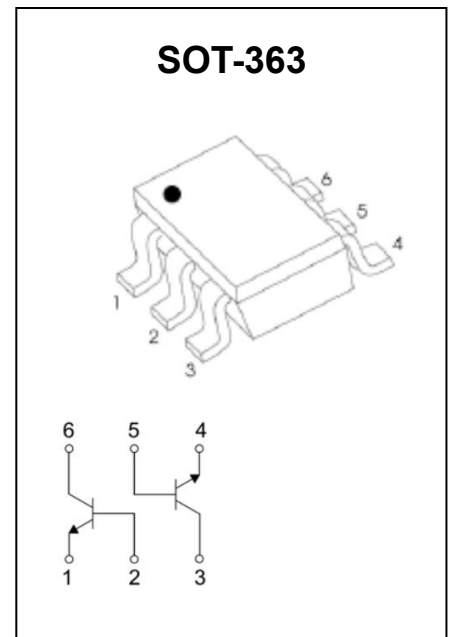
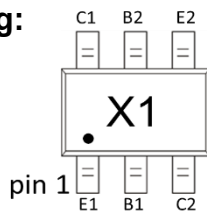


UMX1N Dual Transistor(NPN+NPN)

Application

- This device is designed for general purpose amplifier applications

Marking:



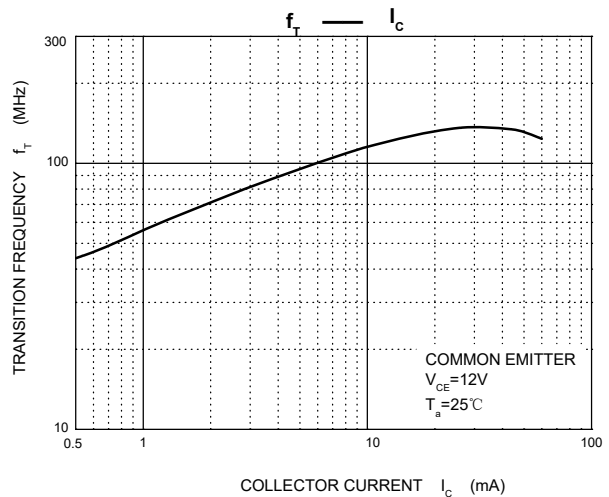
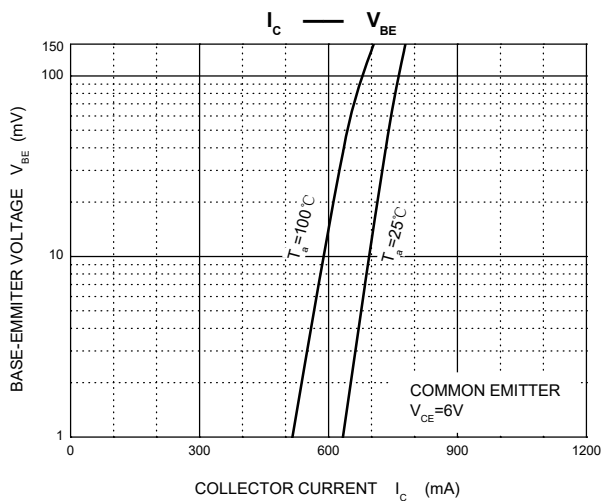
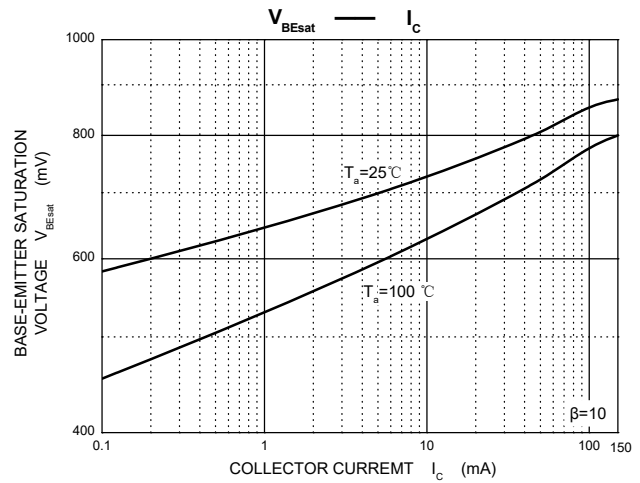
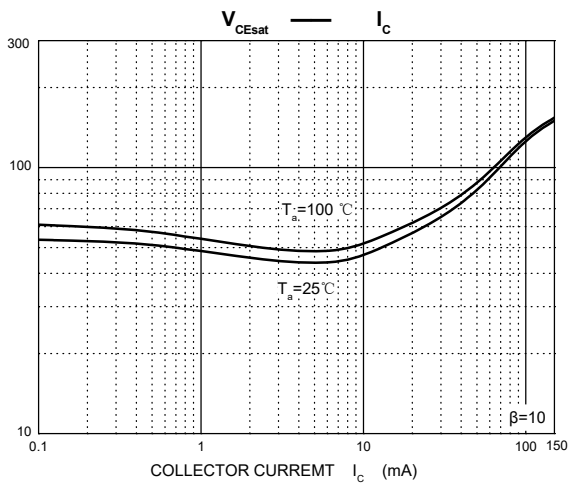
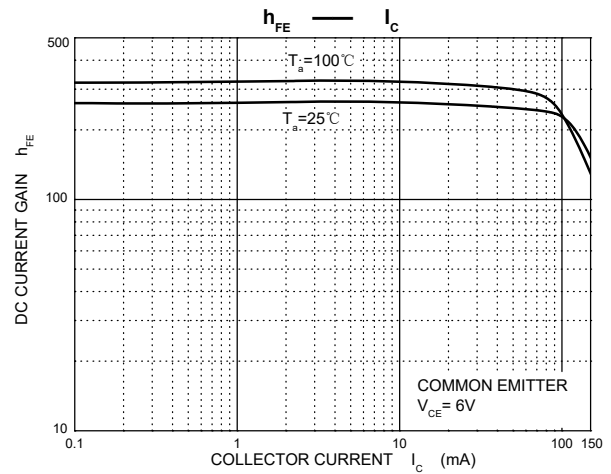
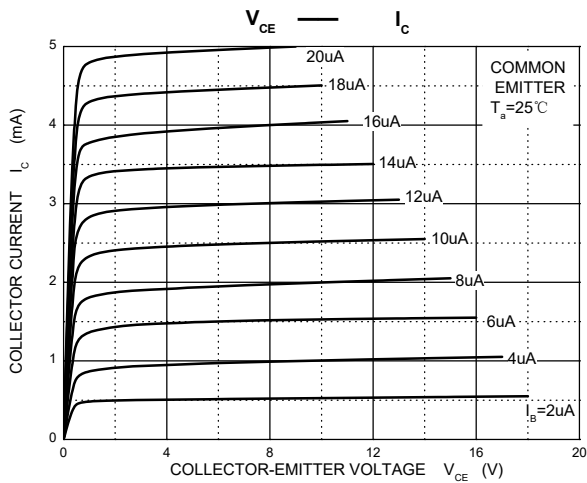
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CEO}	50	V
Emitter-Base Voltage	V _{EBO}	7	V
Collector Current -Continuous	I _c	0.15	A
Collector Power Dissipation	P _c	0.15	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~ +150	°C

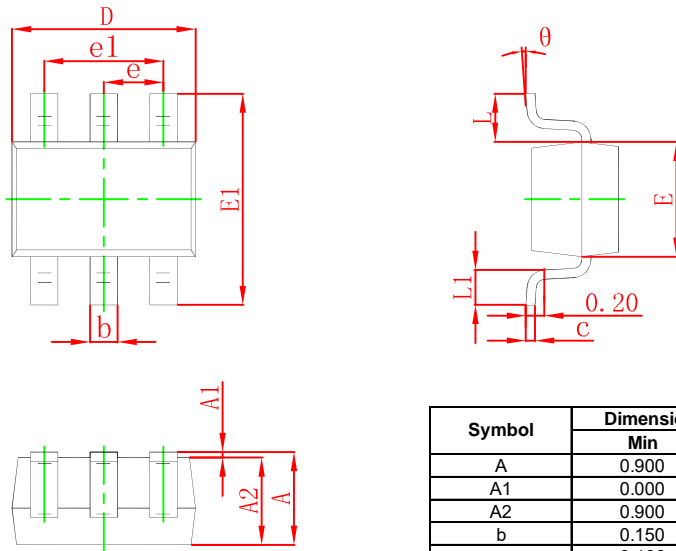
ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _c =50μA, I _E =0	60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _c =1mA, I _B =0	50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =50μA, I _c =0	7			V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0V			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =7V, I _c =0V			100	nA
DC current gain	h _{FE}	V _{CE} =6V, I _c =1mA	120		560	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =50mA, I _B =5mA			0.4	V
Collector output capacitance	C _{ob}	V _{CB} =12V, I _E =0, f=1MHz		2	3.5	pF
Transition frequency	f _T	V _{CE} =12V, I _c =2mA, f=100MHz		180		MHZ

Typical Characteristics

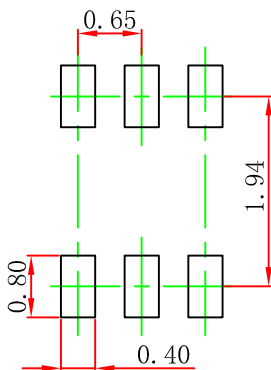


SOT-363 Package Information



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.