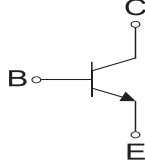
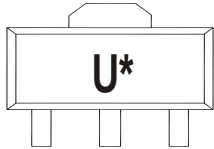


SOT-89-3L Plastic-Encapsulate Transistors**KTC4379**

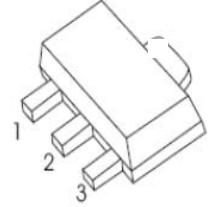
TRANSISTOR (NPN)

FEATURES

- Low saturation voltage

MARKING**Equivalent Circuit**

Range	70-140	120-240
Marking	UO	UY

SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER

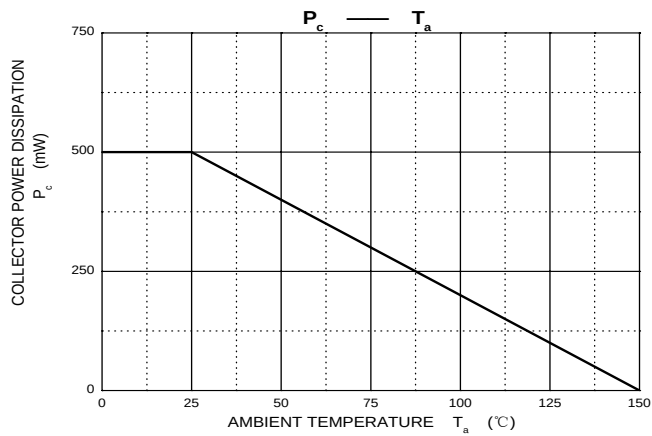
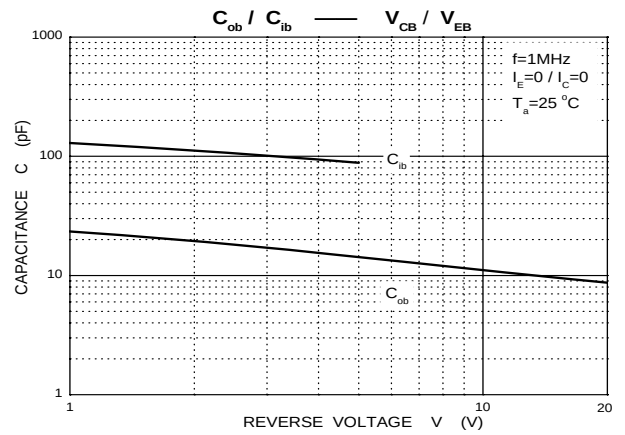
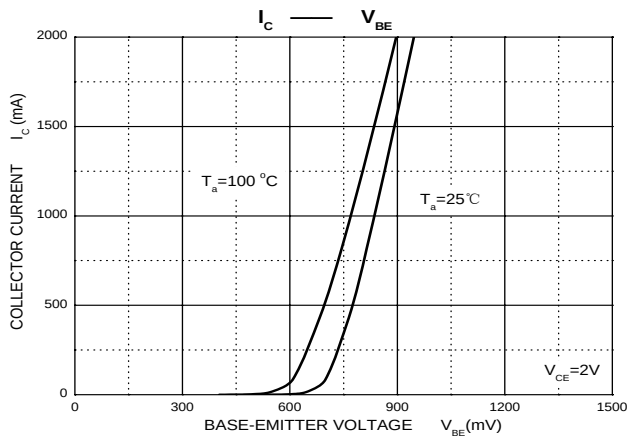
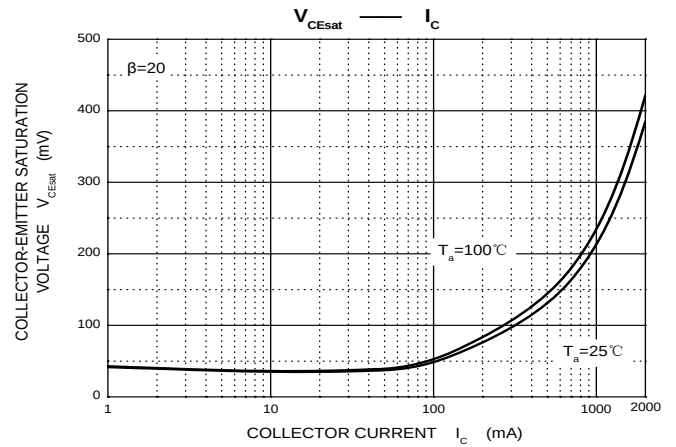
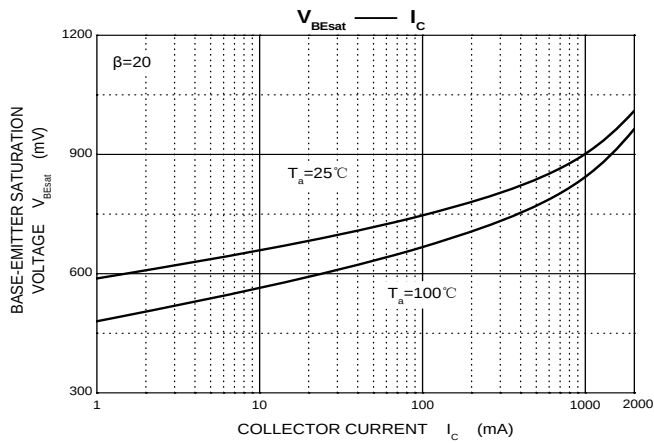
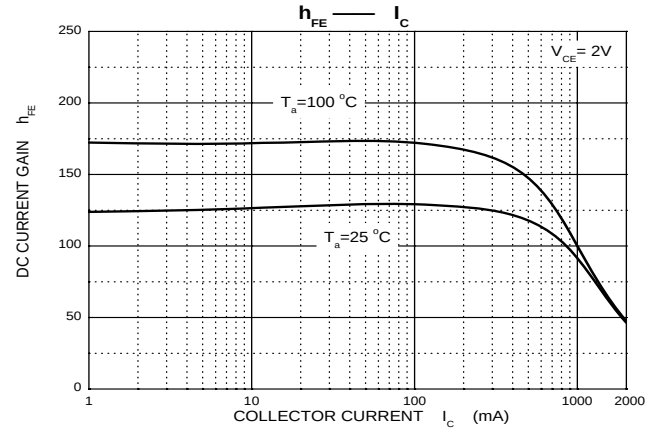
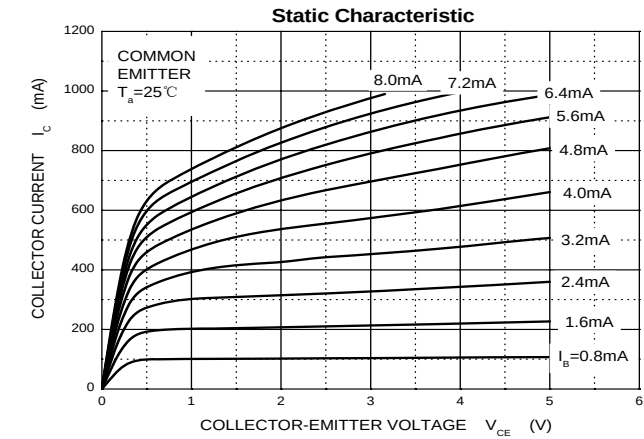
MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	50	V
V_{CE0}	Collector-Emitter Voltage	50	V
V_{EB0}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	2	A
P_C	Collector Power Dissipation	500	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~150	$^{\circ}\text{C}$

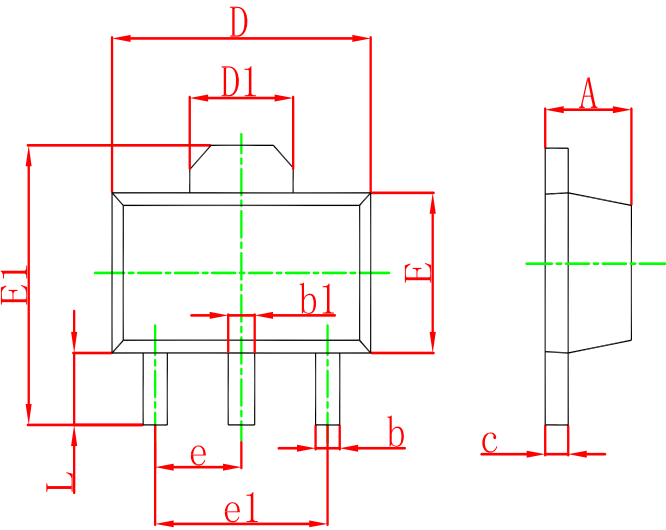
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=50\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=500\text{mA}$	70		240	
	$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=1.5\text{A}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1\text{A}, I_B=50\text{mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1\text{A}, I_B=50\text{mA}$			1.2	V
Transition frequency	f_T	$V_{CE}=2\text{V}, I_C=500\text{mA}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		30		pF
Switching Time	Turn on Time	$V_{CC}=30\text{V}, I_C=1\text{A}, I_{B1}=-I_{B2}=-0.05\text{A}$		0.1		μs
	Storage Time			1.0		
	Fall Time			0.1		

Typical Characteristics

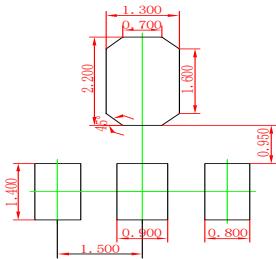


Package Outline Dimensions (SOT-89-3L)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047

Suggested Pad Layout (SOT-89-3L)



- Note:
- 1.Controlling dimension:in millimeters.
 - 2.General tolerance:±0.05mm.
 - 3.The pad layout is for reference purposes only.