TL-2SC2383

SOT-89-3L Plastic-Encapsulate Transistors (NPN)

Features

- High voltage: VCEO=160V
- Large continuous collector current capability

SOT-89-3L

Absolute Maximum Ratings(T_A=25℃)

Symbol	Parameter	Value	Uniat
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	1	A
P_C	Collector Power Dissipation	2	W
T_J,T_{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	℃

Electrical Characteristics (T_A=25℃ unless otherwise specified)

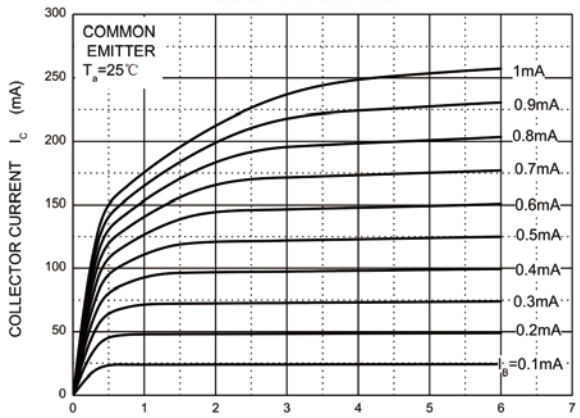
Symbol	Parameter	Test conditions	Min	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=100μA, I_E=0	160		V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA, I_B=0	160		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=10μA, I_C=0	6		V
I_{CBO}	Collector cut-off current	V_{CB}=150V, I_E=0		1	μA
I_{EBO}	Emitter cut-off current	V_{EB}=6V, I_C=0		1	μA
h_{FE}	DC current gain	V_{CE}=5V, I_C=200mA	100	320	
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=500mA, I_B=50mA		1	V
V_{BE}	Base-emitter voltage	I_C=5mA, V_{CE}= 5V	0.45	0.75	V
f_T	Transition frequency	V_{CE}=5V, I_C= 200mA	20		MHz
C_{ob}	Collector output capacitance	V_{CB}=10V,I_E=0,f=1MHz		20	pF

Ordering information

Product ID	Pack	Naming rule	Marking	hFE(1)	Qty(PCS)
2SC2383	SOT-89-3L	2SC2383 产品名称 product name	2383	160-320	1000

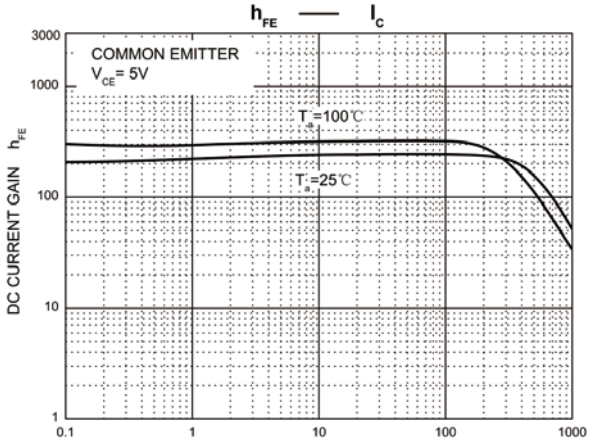
Typical Characteristics

Static Characteristic



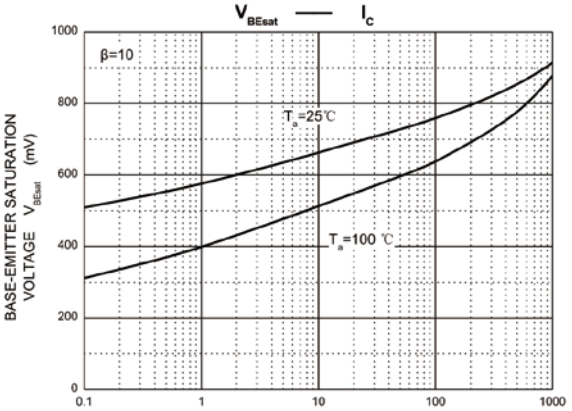
COLLECTOR-EMITTER VOLTAGE V_{CE}(V)

h_{FE} — I_C



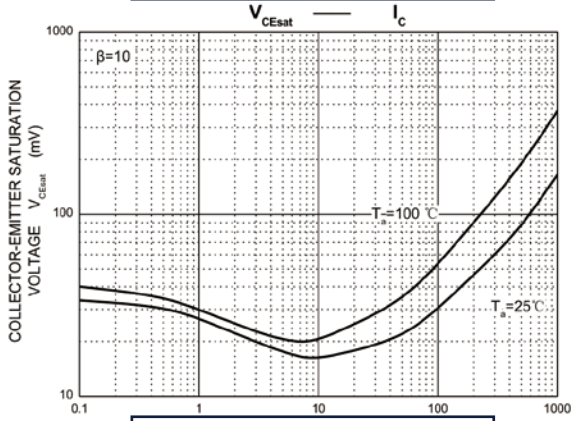
COLLECTOR CURRENT I_C(mA)

V_{BEsat} — I_C



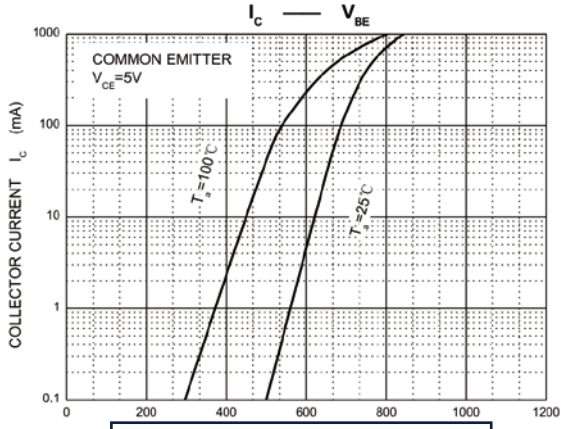
COLLECTOR CURRENT I_C(mA)

V_{CEsat} — I_C



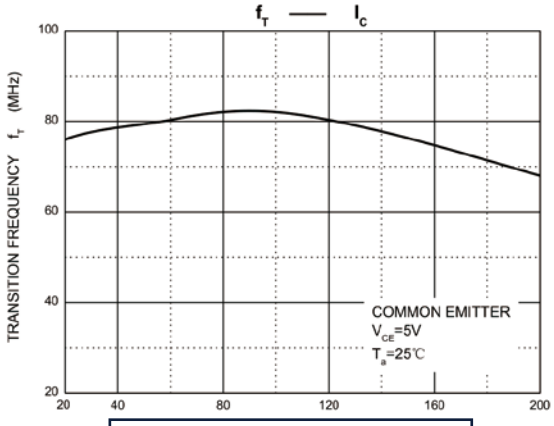
COLLECTOR CURRENT I_C(mA)

I_C — V_{BE}



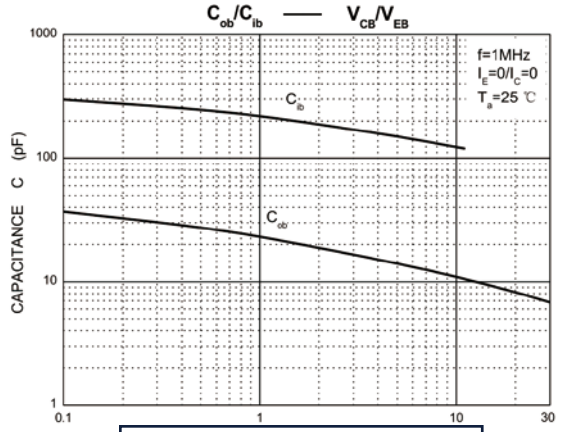
BASE-EMMITER VOLTAGE V_{BE}(mV)

f_T — I_C



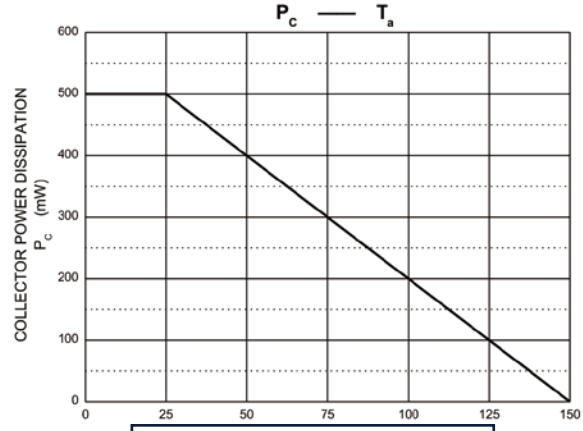
REVERSE VOLTAGE V(V)

C_{ob}/C_{ib} — V_{CB}/V_{EB}



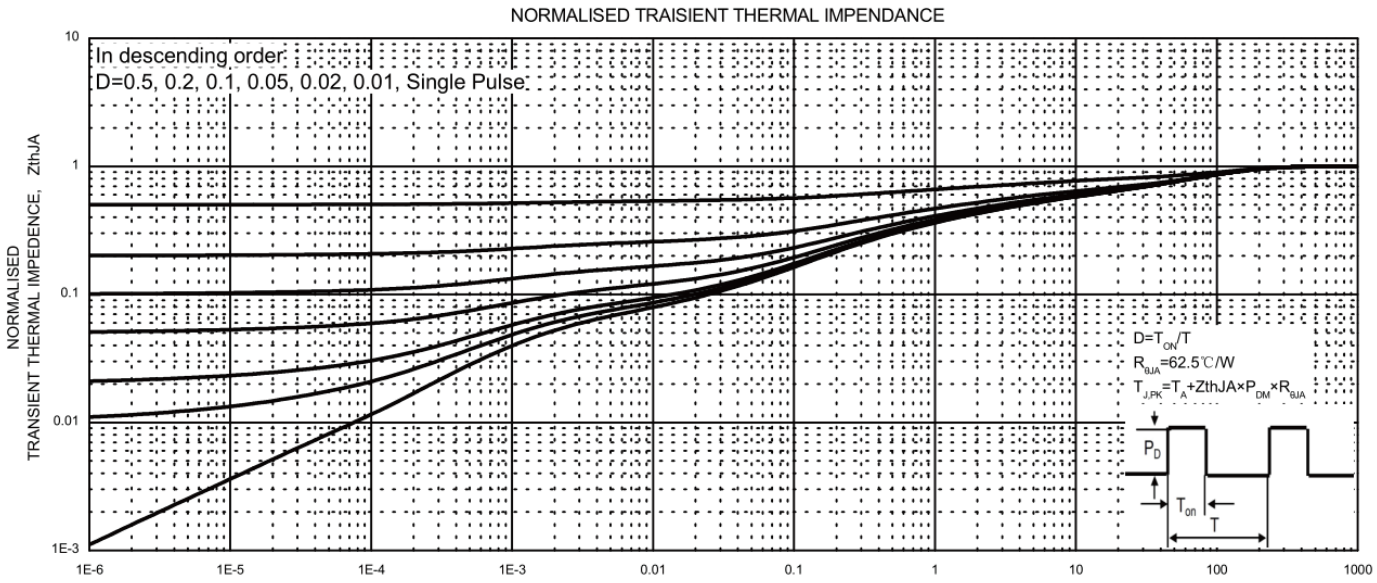
COLLECTOR CURRENT I_C(mA)

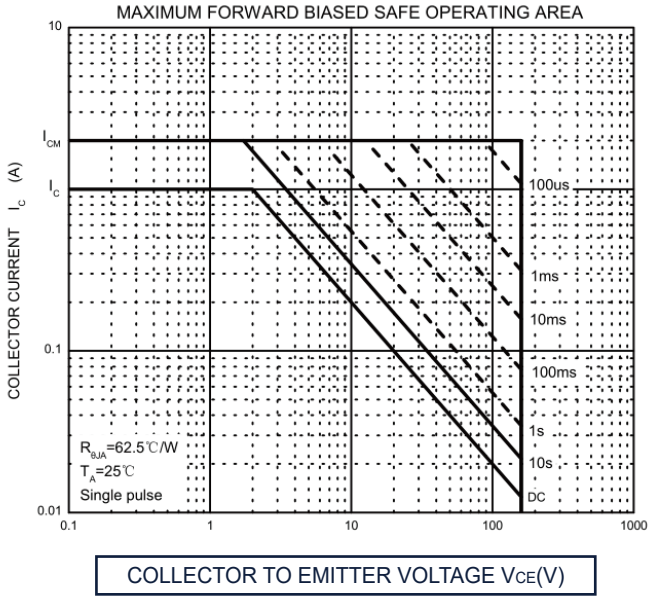
P_C — T_a



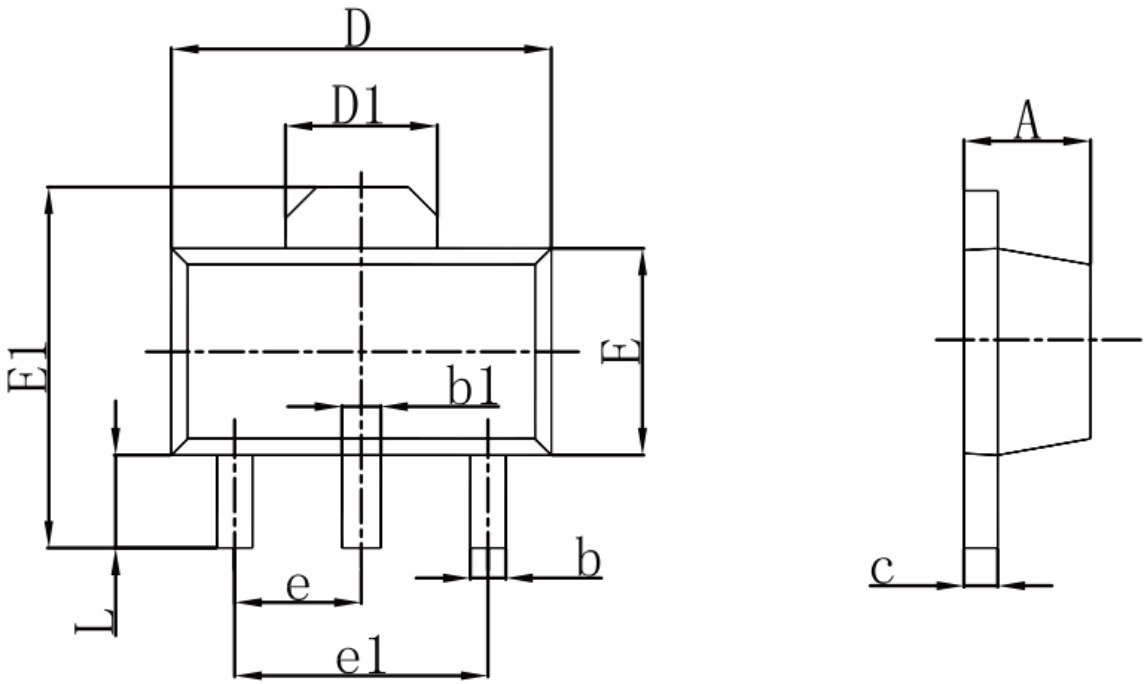
AMBIENT TEMPERATURE Ta(°C)

Typical Characteristics





SOT-89-3L Package Outline Dimensions



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