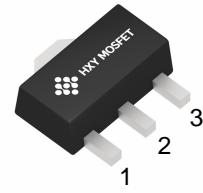




## Features

- High voltage:  $V_{CEO}=160V$
- Large continuous collector current capability

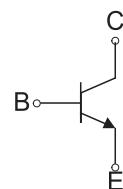
1. BASE



2. COLLECTOR

3. Emitter

SOT-89



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
2SC2383	SOT-89	2383Y	1000

## Maximum Ratings (Ta=25 °C unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	160	V
$V_{CEO}$	Collector-Emitter Voltage	160	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_c$	Collector Current -Continuous	1	A
$P_c$	Collector Power Dissipation	0.5	W
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	°C

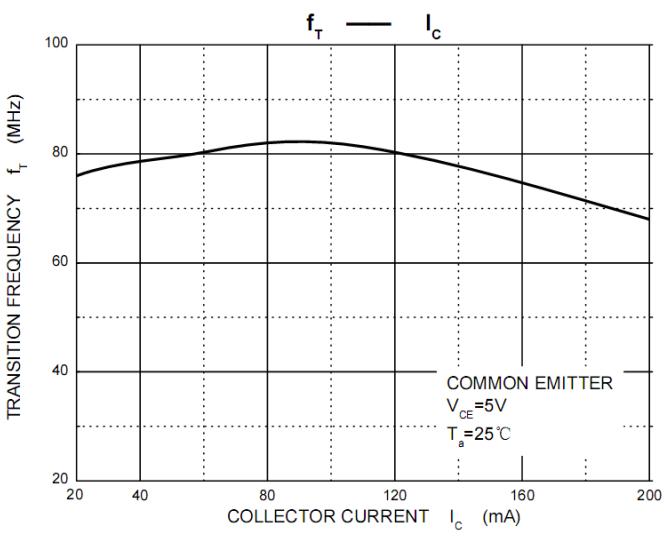
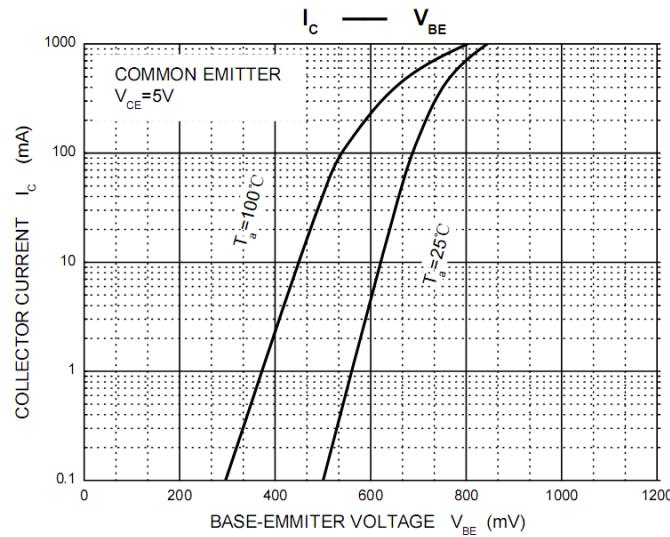
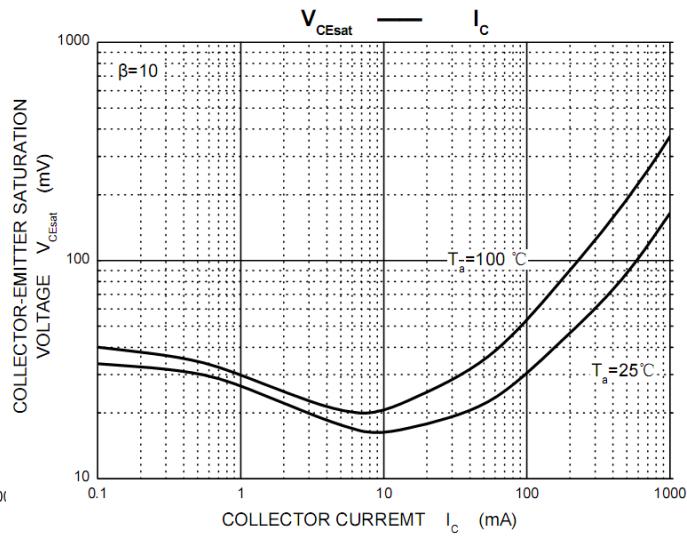
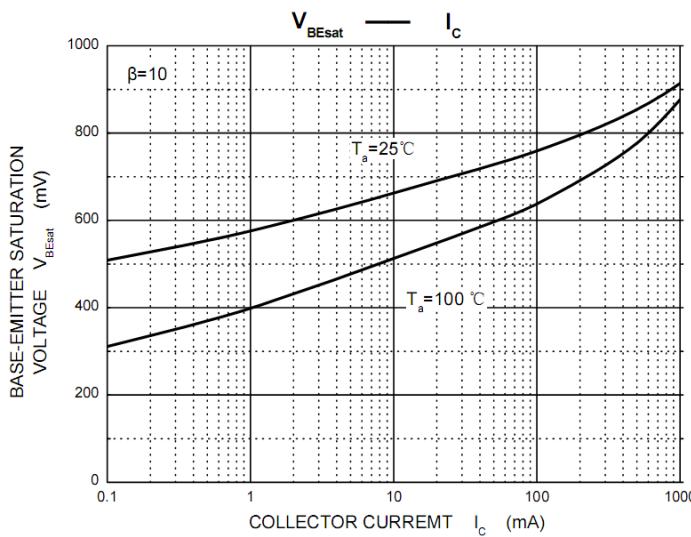
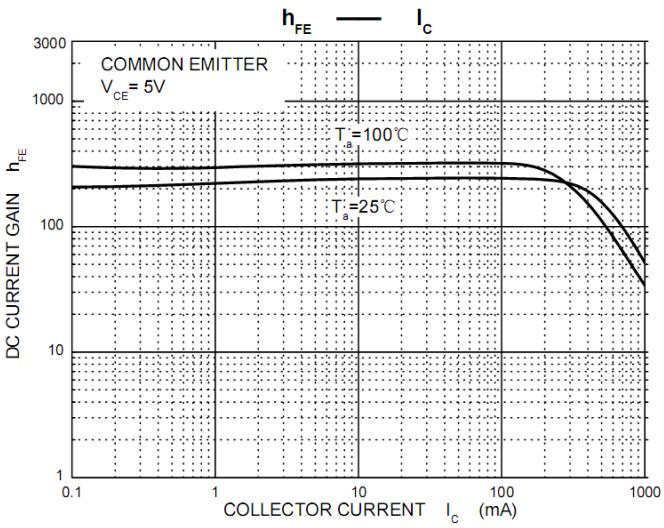
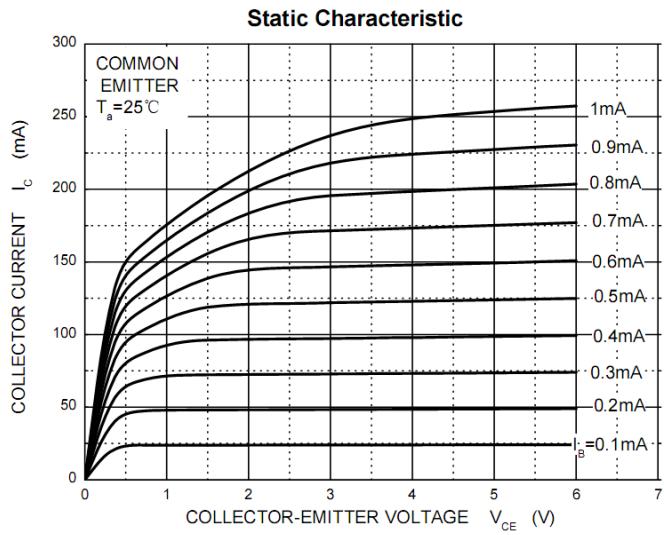
## Electrical Characteristics(Ta=25 °C unless otherwise specified)

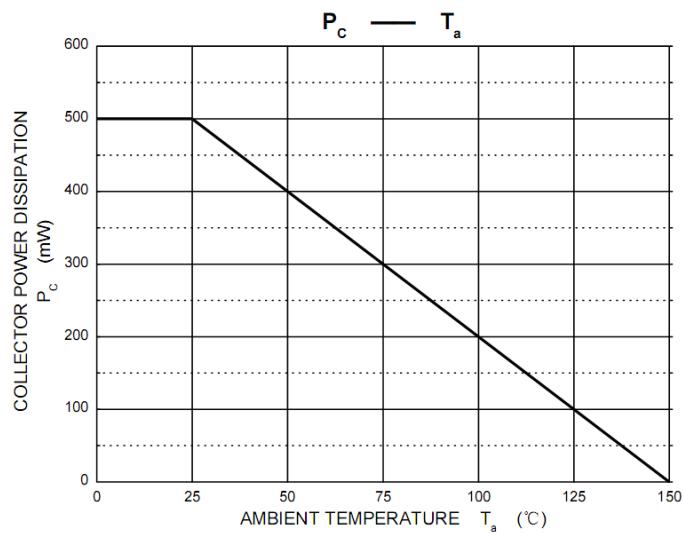
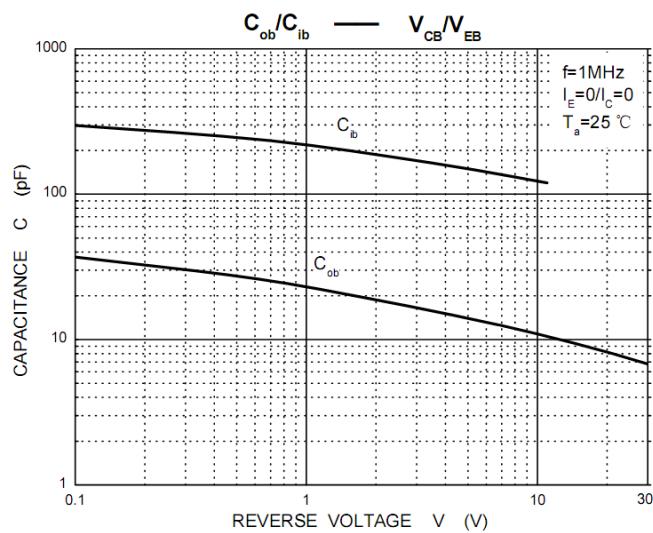
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C= 100\mu A, I_E=0$	160		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C= 10mA, I_B=0$	160		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E= 10\mu A, I_C=0$	6		V
Collector cut-off current	$I_{CBO}$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

\* pulse test

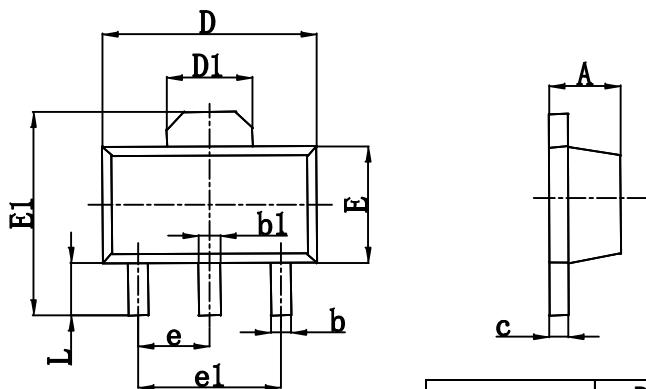


## Typical Characteristics





### SOT-89 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



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