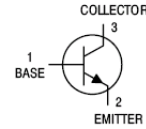




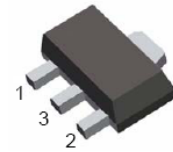
## FEATURES

- High breakdown voltage:  $V_{CEO} = 160\text{ V}$
- Large continuous collector current capability
- Recommended for vertical deflection output & sound output applications for line-operated TVs.
- Complementary to 2SA1013



## APPLICATIONS

- Color TV Vertical Deflection Output Applications



**SOT-89**

## ORDERING INFORMATION

Type No.	Marking	Package Code
2SC2383	HR2/HO2/HY2	SOT-89

## MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	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
$I_B$	Base current	0.5	A
$P_C$	Collector Dissipation	1	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{STG}$	Storage Temperature	-55 to +150	$^\circ\text{C}$



## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

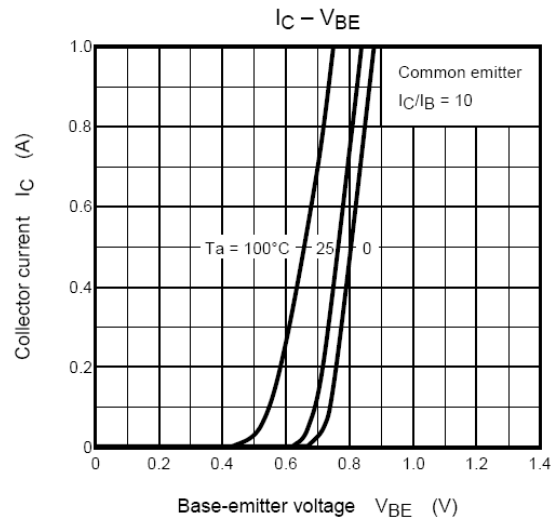
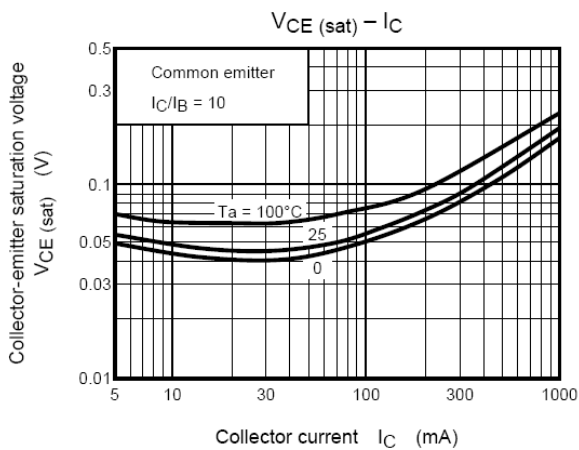
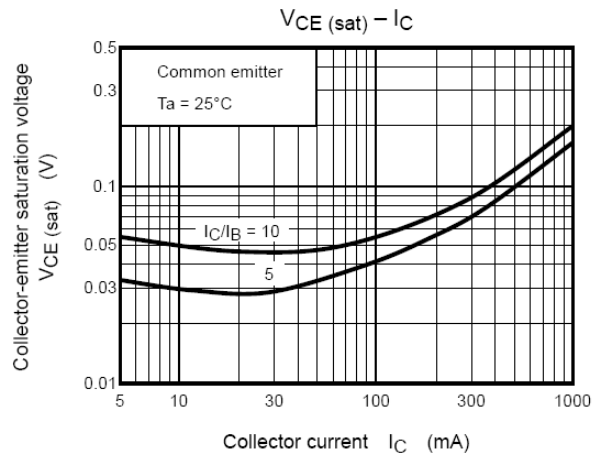
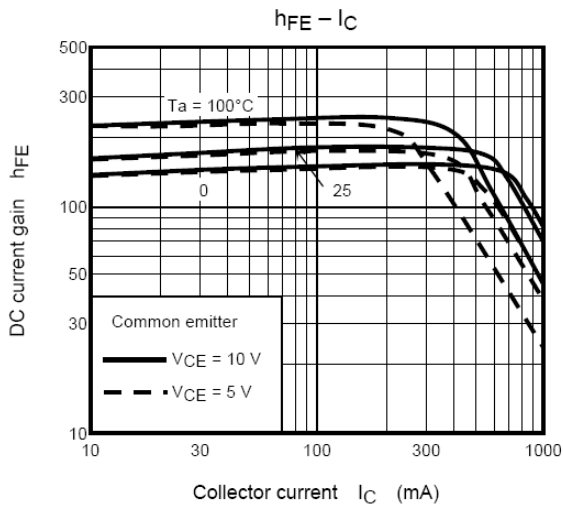
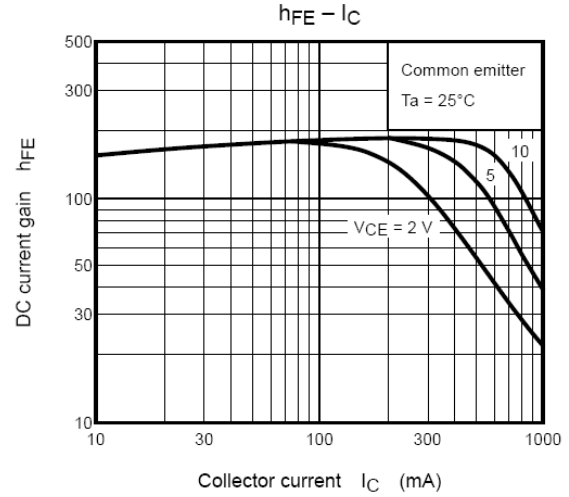
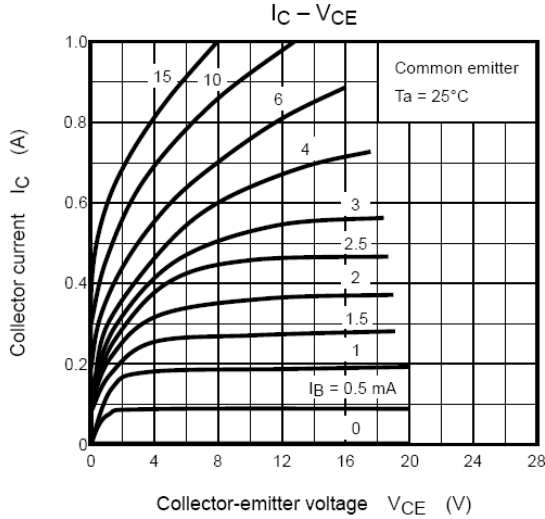
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	160			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=150V, I_E=0$			1.0	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6V, I_C=0$			1.0	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=5V, I_C=200mA$	60		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			1.5	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=5V, I_C=5mA$	0.45		0.75	V
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$			20	pF
Transition frequency	$f_T$	$V_{CE}=5V, I_C=200mA$	20	100		MHz

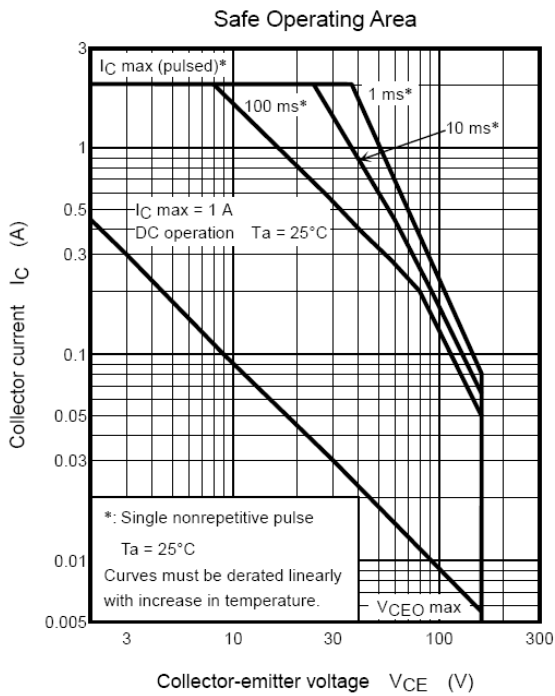
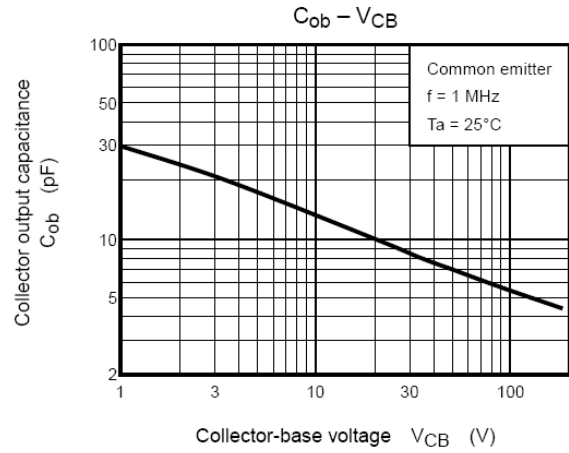
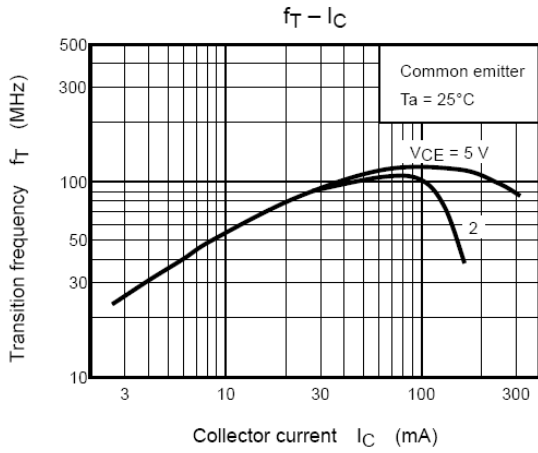
## CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y
Range	60-120	100-200	160-320



## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

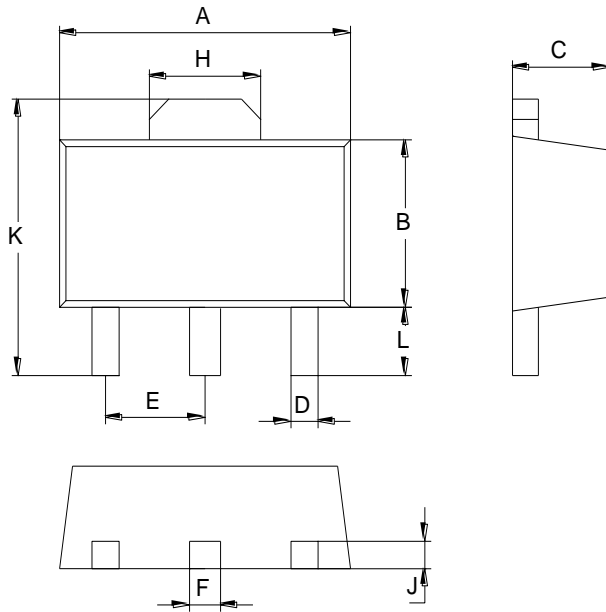




## PACKAGE OUTLINE

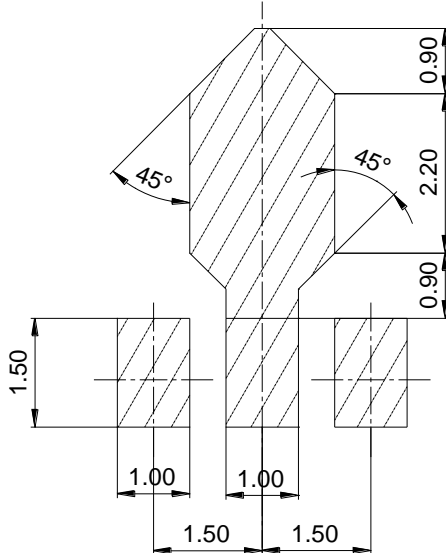
Plastic surface mounted package

SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.30	1.70
D	0.30	0.50
E	1.40	1.60
F	0.38	0.58
H	1.60	1.80
J	0.30	0.50
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

## SOLDERING FOOTPRINT



Unit: mm

## PACKAGE INFORMATION

Device	Package	Shipping
2SC2383	SOT-89	1000 pcs / Tape & Reel