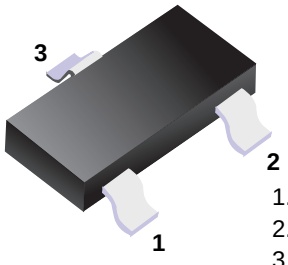
NPN Silicon Epitaxial Planar Transistor

for low frequency power amplifier applications and power switching application.

The transistor is subdivided into two groups, O and Y according to its DC current gain.



1.Base
2.Emitter
3.Collector

SOT-23

Absolute Maximum Ratings (Ta = 25 ℃)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	35	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_c	800	mA
Base Current	I_B	160	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55∽+150	°C

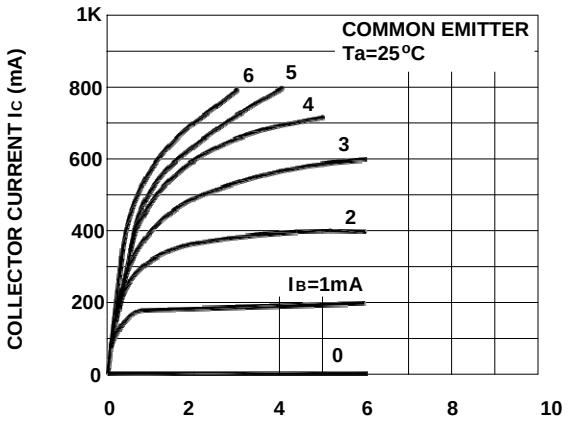
Characteristics at Tamb=25 ℃

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
DC current gain	V_{CE}=1V, I_C=100mA	h_{FE1}	100	-	200	
		h_{FE2}	160	-	320	
	V_{CE}=1V, I_C=800mA	h_{FE3}	40	-	-	
Collector Cutoff Current	V_{CB}=30V	I_{CBO}	-	-	100	nA
Emitter Cutoff Curren	V_{EB}=5V	I_{EBO}			100	nA
Collector Emitter Breakdown Voltage	I_C=10mA	$V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage	I_E=1mA	$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage	I_C=500mA, I_B=20mA	$V_{CE(sat)}$	-	-	0.5	V
Transition frequency	V_{CE}=5V, I_C=10mA,f=100MHz	f_T	-	120	-	MHz
Base Emitter Voltage	I_C=10mA, V_{CE}=1V	V_{BE}	0.5	-	0.8	V
Collector Output Capacitance	V_{CB}=10V, f=1MHz	C_{OB}		13	-	PF

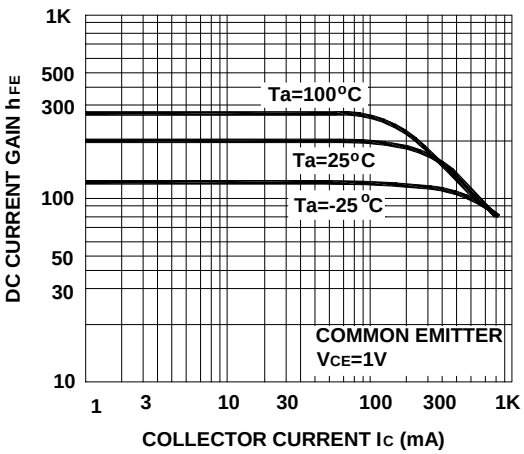
CLASSIFICATION OF $h_{FE(1)}$

RANK	2SC3265-O	2SC3265-Y
RANGE	100-200	160-320
MARKING	EO	EY

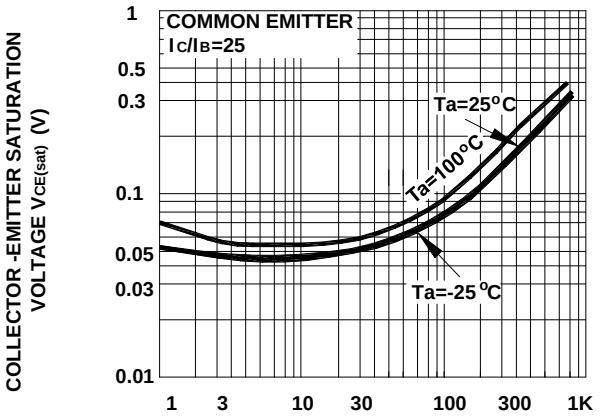
I_C - V_{CE}



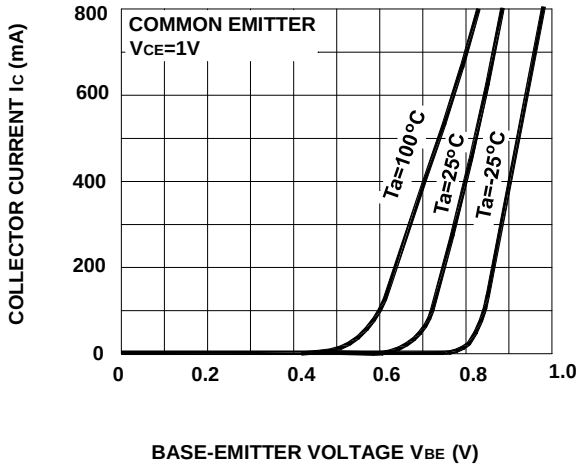
h_{FE} - I_C



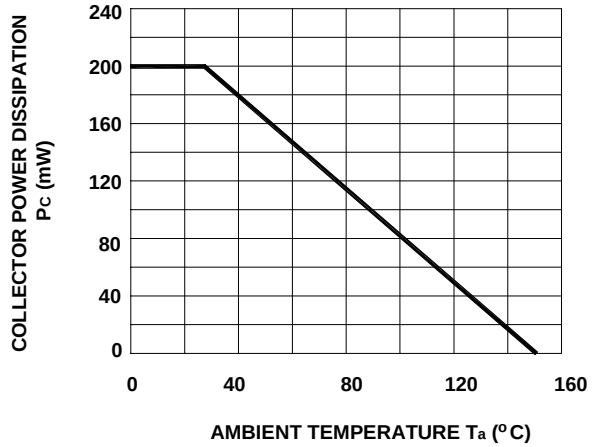
$V_{CE(sat)}$ - I_C



I_C - V_{BE}



Pc - Ta

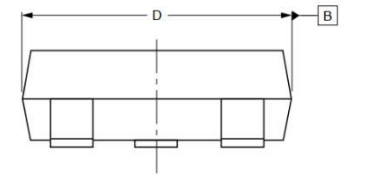


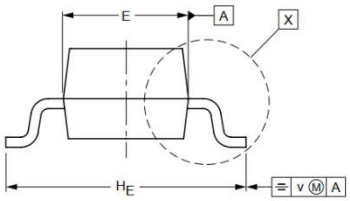
Ordering information

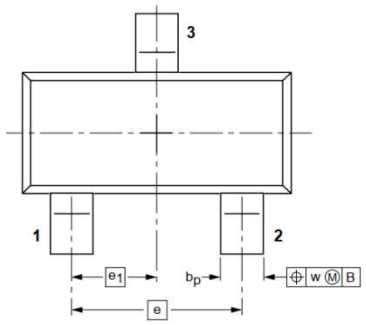
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

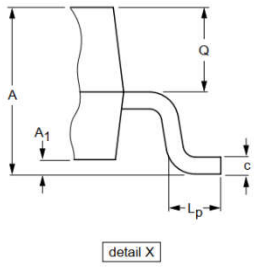
Package Dimensions

SOT-23



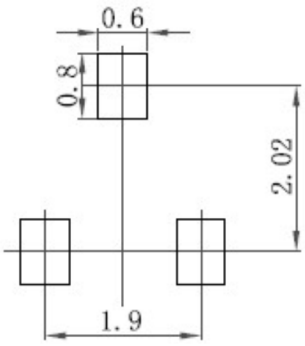






Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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