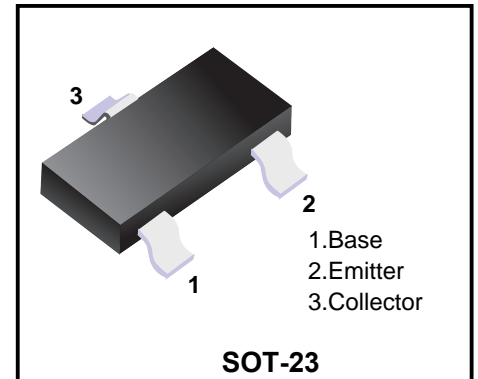


**NPN Transistors**

**Features**

- Collector Current Capability  $I_c=20\text{mA}$
- Collector Emitter Voltage  $V_{CE0}=30\text{V}$



**Absolute Maximum Ratings (Ta=25°C)**

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	40	V
Collector - Emitter Voltage	$V_{CE0}$	30	
Emitter - Base Voltage	$V_{EB0}$	4	
Collector Current - Continuous	$I_c$	20	mA
Collector Power Dissipation	$P_c$	100	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	1000	°C/W
Junction Temperature	$T_J$	125	°C
Storage Temperature Range	$T_{stg}$	-55 to 125	

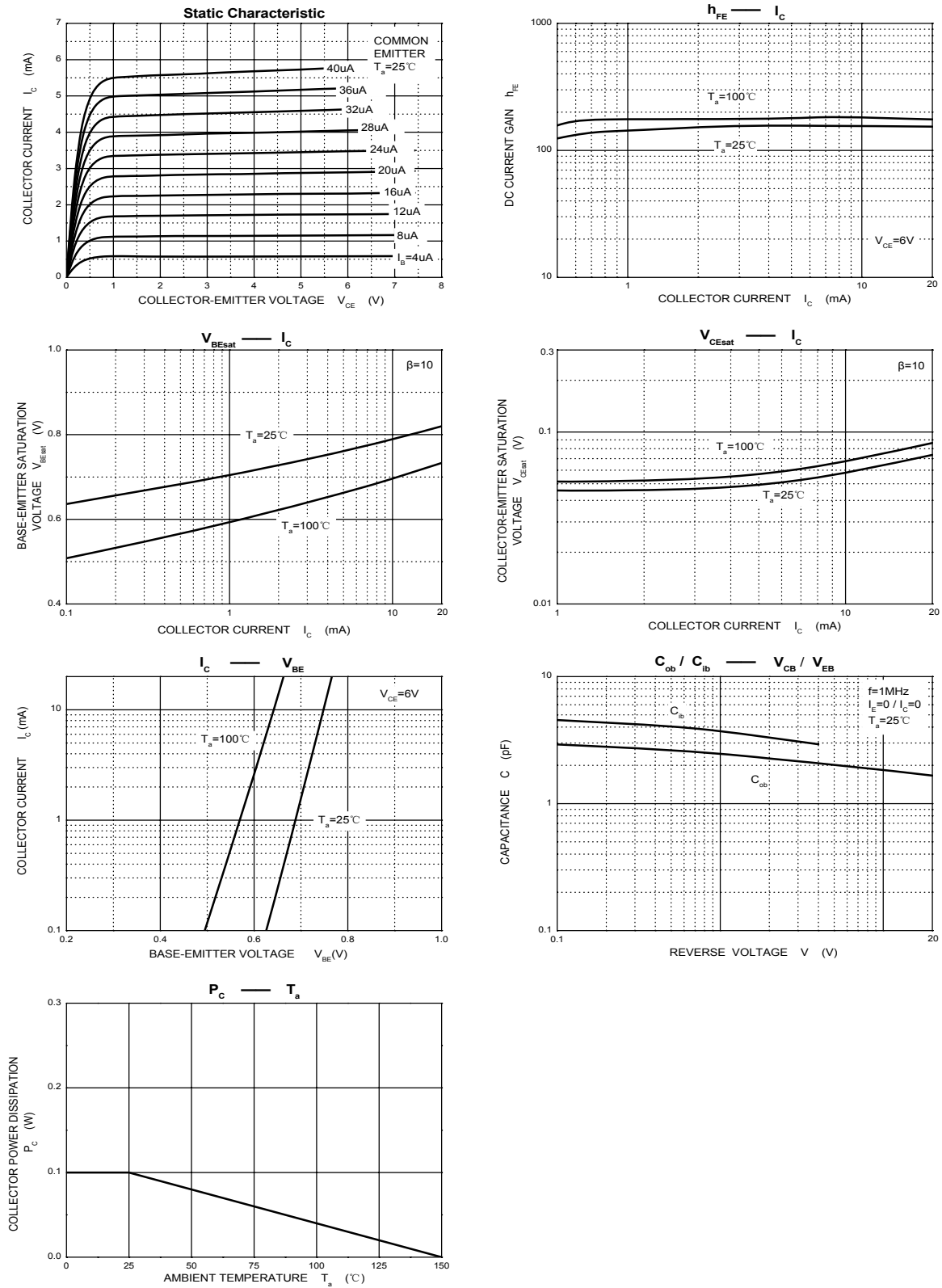
**Electrical Characteristics (Ta=25°C unless otherwise specified.)**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c= 100 \mu\text{A}, I_E= 0$	40			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c= 1 \text{mA}, I_B= 0$	30			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E= 100 \mu\text{A}, I_c= 0$	4			
Collector-base cut-off current	$I_{CB0}$	$V_{CB}= 18 \text{V}, I_E= 0$			0.5	uA
Emitter cut-off current	$I_{EB0}$	$V_{EB}= 4\text{V}, I_c=0$			0.5	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=100 \text{mA}, I_B=10\text{mA}$			0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c=100 \text{mA}, I_B=10\text{mA}$			1.2	
DC current gain	$h_{FE}$	$V_{CE}= 6\text{V}, I_c= 1\text{mA}$	40		200	
Noise Figure	NF	$V_{CE}= 6\text{V}, I_E= -1\text{mA}, f=100\text{MHz}$		2.5	5	dB
Reverse Transfer capacitance	$C_{re}$	$V_{CB}= 6\text{V}, I_E= 0, f=1\text{MHz}$		0.7		pF
Transition frequency	$f_T$	$V_{CE}= 6\text{V}, I_c= 1\text{mA}$		550		MHz

**$h_{FE}$  Classification**

Type	2SC2714-R	2SC2714-O	2SC2714-Y
Range	40-80	70-140	100-200
Marking	QR	QO	QY

**Typical Characteristics**



**Ordering information**

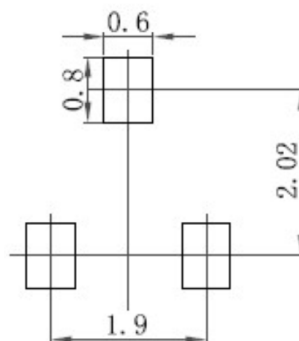
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

**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**



## Disclaimer

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