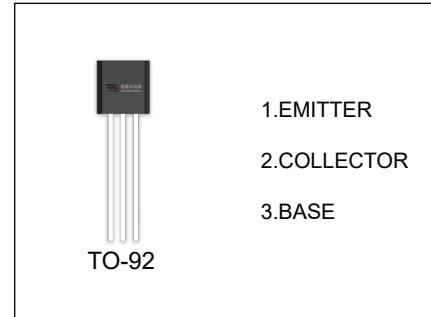


## 2SC2717 TRANSISTOR (NPN)

### FEATURES

- High Gain:  $G_{pe} = 33$  dB ( Typ. ) (  $f = 45\text{MHz}$  )
- Good Linearity of  $h_{FE}$ .



### ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC2717	TO-92	Bulk	1000pcs/Bag
2SC2717-TA	TO-92	Tape	2000pcs/Box

### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	30	V
$V_{CEO}$	Collector-Emitter Voltage	25	V
$V_{EBO}$	Emitter-Base Voltage	4	V
$I_c$	Collector Current -Continuous	50	mA
$P_c$	Collector Power Dissipation	300	mW
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55 ~ +150	°C
$R_{eJA}$	Thermal Resistance From Junction To Ambient	417	°C /W

**T<sub>a</sub>=25 °C unless otherwise specified**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
<b>Collector-base breakdown voltage</b>	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA,I <sub>E</sub> =0	30			V
<b>Collector-emitter breakdown voltage</b>	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA,I <sub>B</sub> =0	25			V
<b>Emitter-base breakdown voltage</b>	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA,I <sub>C</sub> =0	4			V
<b>Collector cut-off current</b>	I <sub>CBO</sub>	V <sub>CB</sub> =30V,I <sub>E</sub> =0			0.1	μA
<b>Emitter cut-off current</b>	I <sub>EBO</sub>	V <sub>EB</sub> =3V,I <sub>C</sub> =0			0.1	μA
<b>DC current gain</b>	h <sub>FE1</sub>	V <sub>CE</sub> =12.5V,I <sub>C</sub> =12.5mA	90		320	
<b>DC current gain</b>	h <sub>FE2</sub>	V <sub>CE</sub> =5V,I <sub>C</sub> =50mA	40			
<b>Collector-emitter saturation voltage</b>	V <sub>CE(sat)</sub>	I <sub>C</sub> =15mA,I <sub>B</sub> =1.5mA			0.2	V
<b>Base-emitter saturation voltage</b>	V <sub>BE(sat)</sub>	I <sub>C</sub> =15mA,I <sub>B</sub> =1.5mA			1.5	V
<b>Transition frequency</b>	f <sub>T</sub>	V <sub>CE</sub> =12.5V,I <sub>C</sub> =12.5mA	300			MHz
<b>Collector output capacitance</b>	C <sub>ob</sub>	V <sub>CB</sub> =10V,I <sub>E</sub> =0,f=30MHz	0.8		2.0	pF
<b>Collector-base time constant</b>	C <sub>C</sub> <sup>.rbβ</sup>	V <sub>CB</sub> =10V,I <sub>E</sub> =-1mA,f=30MHz			25	ps
<b>Power gain (fig.)</b>	G <sub>pe</sub>	V <sub>CC</sub> =12.5V,I <sub>E</sub> =-12.5mA,f=45MHz	28		36	dB