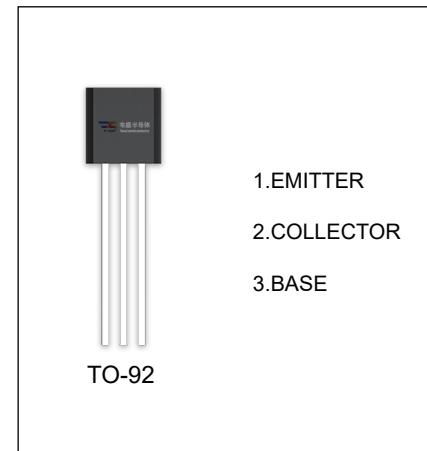


## 2SC2216 TRANSISTOR (NPN)

### FEATURES

- Amplifier Dissipation NPN Silicon



### ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC2216	TO-92	Bulk	1000pcs/Bag
2SC2216-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	50	V
$V_{CEO}$	Collector-Emitter Voltage	45	V
$V_{EBO}$	Emitter-Base Voltage	4	V
$I_C$	Collector Current -Continuous	0.05	A
$P_D$	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	417	°C /W
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 100μA, I <sub>E</sub> =0	50			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 10 mA , I <sub>B</sub> =0	45			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 100μA, I <sub>C</sub> =0	4			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =50 V I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 3 V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =12.5V, I <sub>C</sub> =12.5 mA	40		140	
Collector-emitter saturation voltage	V <sub>CE (sat)</sub>	I <sub>C</sub> = 15mA, I <sub>B</sub> =1.5 mA			0.2	V
Bass-emitter saturation voltage	V <sub>BE (sat)</sub>	I <sub>C</sub> = 15mA, I <sub>B</sub> =1.5 mA			1.5	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =12.5 V, I <sub>C</sub> =12.5mA	300			MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V,I <sub>E</sub> =0, f=30MHz			2.0	pF