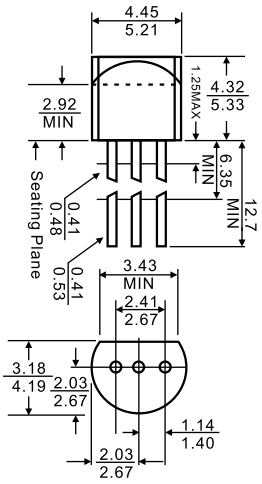
2SC2216(NPN)

TO-92 Bipolar Transistors

1. BASE
2. EMITTER
3. COLLECTOR

TO-92



Dimensions in inches and (millimeters)

Features

✧ Amplifier dissipation NPN Silicon

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
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	50	mA
P_C	Collector Dissipation	300	mW
T_J	Junction Temperature	125	℃
T_{stg}	Storage Temperature	-55-125	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 100μA, I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 10 mA , I_B=0	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100μA, I_C=0	4			V
Collector cut-off current	I_{CBO}	V_{CB}=50 V I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 3 V, I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=12.5V, I_C=12.5 mA	40		140	
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C= 15mA, I_B=1.5 mA			0.2	V
Bass-emitter saturation voltage	$V_{BE\ (sat)}$	I_C= 15mA, I_B=1.5 mA			1.5	V
Transition frequency	f_T	V_{CE}=12.5 V, I_C=12.5mA	300			MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=30MHz			2.0	pF

2SC2216(NPN)

TO-92 Bipolar Transistors

Typical Characteristics