



TO-92 Plastic-Encapsulate Transistors

2SC2216 TRANSISTOR (NPN)

FEATURES

Power dissipation

$$P_{CM}: 300 \text{ mW (} T_{amb}=25^{\circ}\text{C)}$$

Collector current

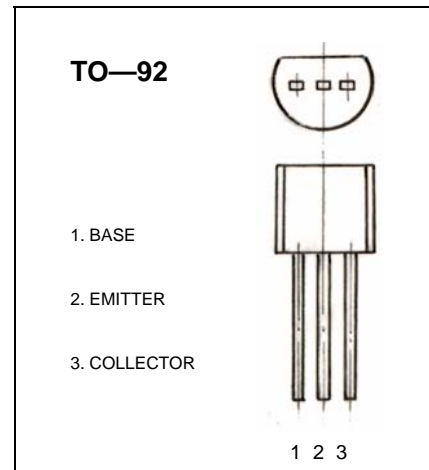
$$I_{CM}: 50 \text{ mA}$$

Collector-base voltage

$$V_{(BR)CBO}: 50 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^{\circ}\text{C to } +150^{\circ}\text{C}$$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

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