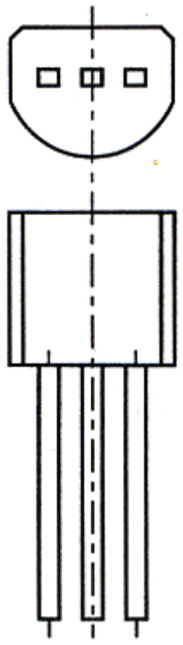
TO-92 Plastic-Encapsulate Transistors

2SC2216 TRANSISTOR(NPN)



TO-92

1.EMITTER

2.BASE

3.COLLECTOR

FEATURES

Power dissipation

P_{CM}: 300mW (Tamb=25℃)

Collector current

I_{CM}: 50 mA

Collector-base voltage

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

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to + 150℃

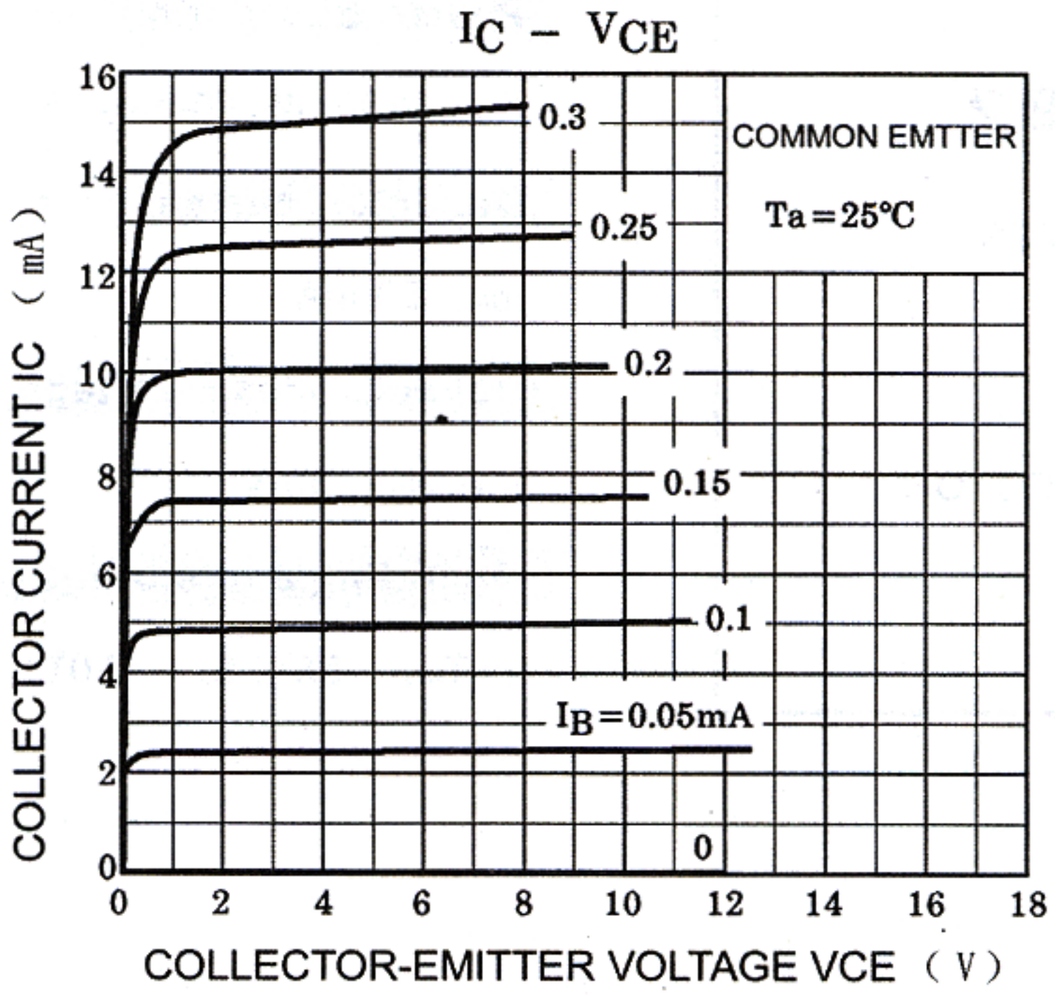
ELECTRICAL CHARACTERISTICS

(Tamb=25℃ unless otherwise specified)

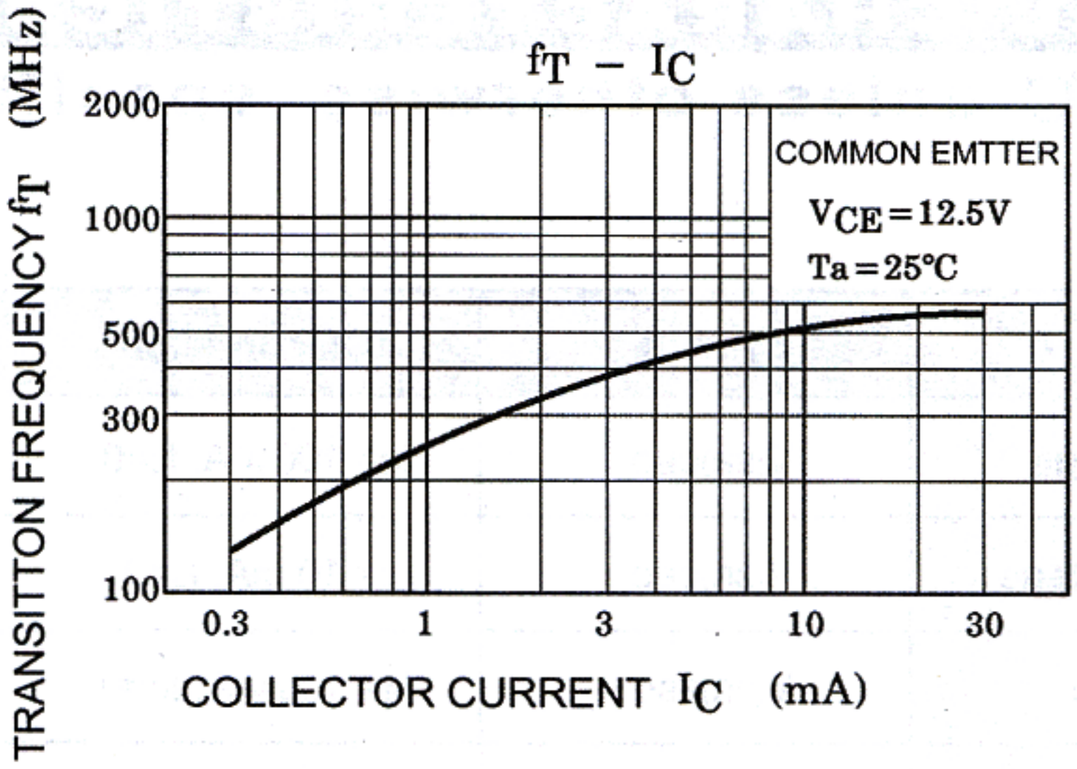
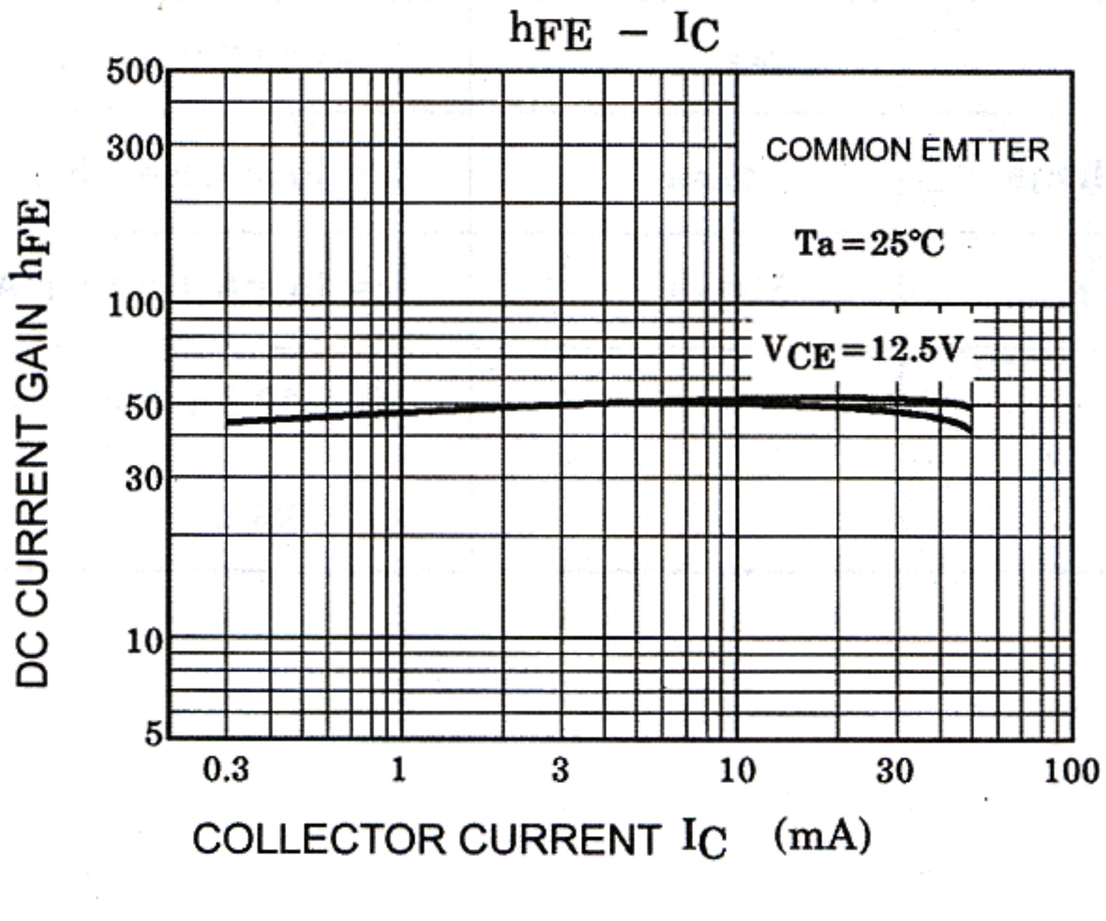
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 100 μ A, I_E=0	50		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 10 mA, I_B=0	45		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 100 μ A, I_C=0	4		V
Collector cut-off current	I_{CBO}	V_{CB}=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

Typical Characteristics

$I_C - V_{CE}$



$f_T - I_C$



$h_{FE} - I_C$