

### 2SC2229 TRANSISTOR (NPN)

#### FEATURE

Power dissipation

$P_{CM}$ : 0.8 W ( $T_{amb}=25^{\circ}C$ )

Collector current

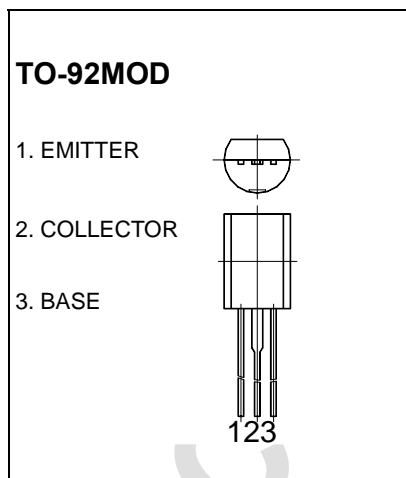
$I_{CM}$ : 0.05 A

Collector-base voltage

$V_{(BR)CBO}$ : 200 V

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	200		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	150		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 200V, I_E = 0$		0.1	$\mu A$
Collector cut-off current	$I_{CER}$	$V_{CB} = 150V, R_{EB} = 10M\Omega$		1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$		0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = 5V, I_C = 10mA$	70	240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10mA, I_B = 1mA$		0.5	V
Base-emitter voltage	$V_{BE(sat)}$	$I_C = 10mA, I_B = 1mA$		1	V
Transition frequency	$f_T$	$V_{CE} = 30V, I_C = 10mA$ $f = 30MHz$	80		MHz

#### CLASSIFICATION OF $h_{FE}$

Rank	O	Y
Range	70-140	120-240