

**TO-92MOD Plastic-Encapsulate Transistors****2SC2236** TRANSISTOR (NPN)**FEATURE**

Power dissipation

 P_{CM} : 0.9 W ($T_{amb}=25^{\circ}C$)

Collector current

 I_{CM} : 1.5 A

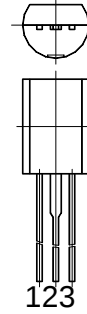
Collector-base voltage

 $V_{(BR)CBO}$: 30 V

Operating and storage junction temperature range

 T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$ **TO-92MOD**

1. EMITTER
2. COLLECTOR
3. BASE

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 1mA, I_E = 0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 1mA, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 30V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 2V, I_C = 500mA$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1.5A, I_B = 0.03A$			2	V
Base-emitter voltage	V_{BE}	$I_C = 500mA, V_{CE} = 2V$			1	V
Transition frequency	f_T	$V_{CE} = 2V, I_C = 500mA$		120		MHz
Collector output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$			30	pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320