

**TO-92MOD Plastic-Encapsulate Transistors****2SC2235** TRANSISTOR (NPN)**FEATURES**

Power dissipation

 P_{CM} : 900 mW ($T_{amb}=25^{\circ}C$)

Collector current

 I_{CM} : 800 mA

Collector-base voltage

 $V_{(BR)CBO}$: 120 V

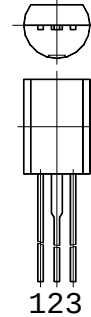
Operating and storage junction temperature range

 T_J, T_{stg} : $-55^{\circ}C$ to $+15^{\circ}C$ **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	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	120			V
Emitter-Base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=120V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=5V, I_C=100mA$	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			1.0	V
Base-emitter voltage	V_{BE}	$I_C=500mA, V_{CE}=5V$			1.0	V
Transition frequency	f_T	$V_{CE}=5V, I_C=100mA$		120		MHz
Collector output capacitance	C_{ob}	$V_{CE}=10V, I_C=0$ $f=1MHz$			30	pF

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	80-160	120-240