



# TO-92L Plastic-Encapsulate Transistors

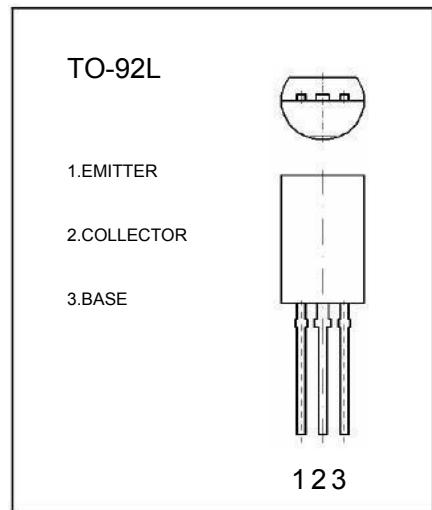
## C2236 TRANSISTOR(NPN)

### FEATURES

Low collector to emitter saturation voltage  $V_{CE(sat)}$ .  
Complementary pair with A966

### MAXIMUM RATINGS ( $T_A=25^\circ C$ unless otherwise noted)

Symbol	Parameter			Units
$V_{CBO}$	Collector-Base Voltage	30	V	
$V_{CEO}$	Collector-Emitter Voltage	30	V	
$V_{EBO}$	Emitter-Base Voltage	5	V	
$I_c$	Collector Current-Continuous	1.5	A	
$P_c$	Collector Power Dissipation	0.9	W	
$T_J$	Junction Temperature	150	$^\circ C$	
$T_{stg}$	Storage Temperature	-55-150	$^\circ C$	



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-basebreakdown 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-basebreakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_c=0$	5			V
Collector cut-offcurrent	$I_{CBO}$	$V_{CB}=30V, I_E=0$			0.1	$\mu A$
<b>Emitter cut-off current</b>	$I_{EBO}$	$V_{EB}= 5V, I_c=0$			0.1	$\mu A$
DC currentgain	$h_{FE(1)}$	$V_{CE}=2V, I_c=500mA$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=1.5A, I_B=300mA$			2.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c=500mA, V_{CE}=2V$			1.0	V
Transitionfrequency	$f_T$	$V_{CE}=2V, I_c=500mA$		120		MHz

### CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320

