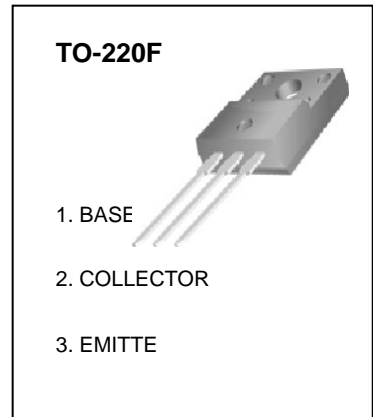


**TO-220F Plastic-Encapsulate Transistors****3CA1837** TRANSISTOR (PNP)

## FEATURES

- High Transition Frequency :  $f_T=70\text{MHz}$ (Typ)
- Complementary to 3DA4793
- Collector Power Dissipation

$P_{CM} : 2\text{W}$  ( $T_{amb}=25^\circ\text{C}$ )  
 $20\text{W}$  ( $T_{case}=25^\circ\text{C}$ )

MAXIMUM RATINGS\*  $T_A=25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-230	V
$V_{CEO}$	Collector-Emitter Voltage	-230	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-1000	mA
$I_B$	Base Current	-100	mA
$T_J$	Junction Junction	150	$^\circ\text{C}$
$T_{stg}$	Storage Junction	-55-150	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}$ , $I_E=0$	-230			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$ , $I_B=0$	-230			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}$ , $I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-230\text{V}$ , $I_E=0$			-10	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}$ , $I_C=0$			-10	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=-5\text{V}$ , $I_C=-100\text{mA}$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}$ , $I_B=-50\text{mA}$			-1.5	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}$ , $I_C=-100\text{mA}$	30			MHz

# Typical Characteristics

3CA1837

