



## 2N5302

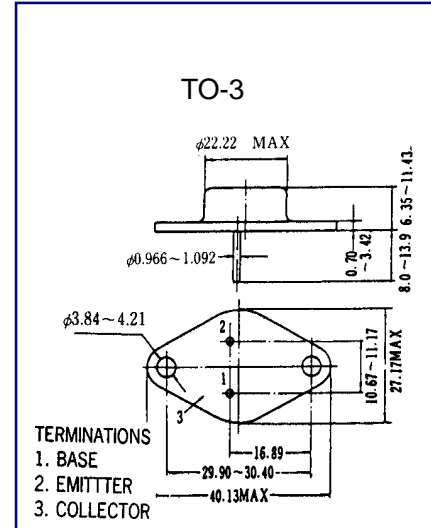
## NPN PLANAR SILICON TRANSISTOR

### AUDIO POWER AMPLIFIER DC TO DC CONVERTER

- High Current Capability
- High Power Dissipation

### ABSOLUTE MAXIMUM RATING ( $T_A=25^\circ\text{C}$ )

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	100	V
Collector-Emitter Voltage	$V_{CE0}$	60	V
Emitter-Base voltage	$V_{EB0}$	7	V
Collector Current (DC)	IC	30	A
Collector Dissipation	PC	200	W
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-50~150	$^\circ\text{C}$



### ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ )

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Base Breakdown Voltage	$BV_{CB0}$	$I_C=10\text{ mA}$ $I_E=0$	50			V
Collector Emitter Breakdown Voltage	$BV_{CE0}$	$I_C=5\text{ mA}$ $R_{BE}=\infty$	50			V
Emitter Base Breakdown Voltage	$BV_{EB0}$	$I_E=5\text{ mA}$ $I_C=0$	6			V
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=30\text{V}$ $I_E=0$			0.1	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4\text{V}$ $I_C=0$			0.1	mA
DC Current Gain	hFE	$V_{CE}=5\text{V}$ $I_C=10\text{A}$	15		60	
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10\text{A}$ $I_B=1.0\text{A}$			1.0	V