



2N5302

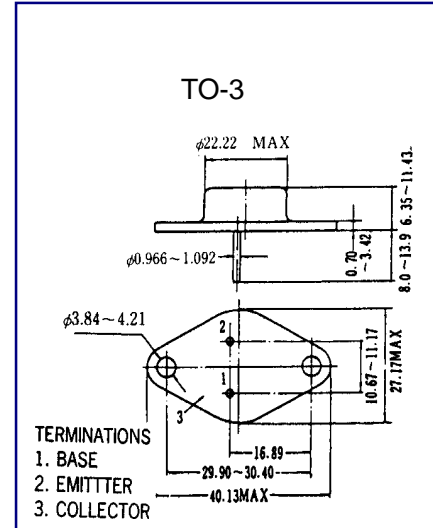
NPN PLANAR SILICON TRANSISTOR

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_{CB0}	$V_{CB}=30\text{V}$ $I_E=0$			0.1	mA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=4\text{V}$ $I_C=0$			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