

TO-247 Plastic-Encapsulate Transistors

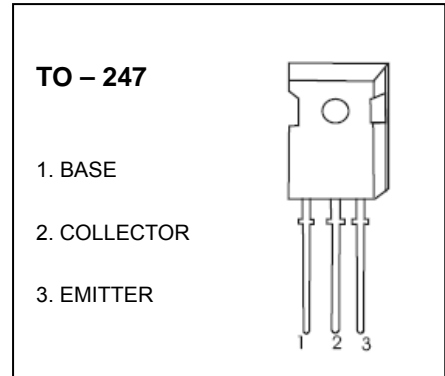
2SA1633 TRANSISTOR (PNP)

FEATURES

- High Breakdown Voltage
- High Current and High Power Capability

APPLICATIONS

- For Audio Output Applications



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-150	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-10	A
P_C	Collector Power Dissipation	3.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	36	$^\circ\text{C}/\text{W}$
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-150			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-50\text{mA}, I_B=0$	-150			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB}=-120\text{V}, I_E=0$			-10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-10	μA
DC current gain	h_{FE}	$V_{CE}=-5\text{V}, I_C=-1\text{A}$	60		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-5\text{A}, I_B=-0.5\text{A}$			-2.5	V
Transition frequency	f_T	$V_{CE}=-5\text{V}, I_C=-1\text{A}$	10			MHz