



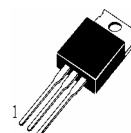
APPLICATIONS

High Speed Switching And Power Amplifier.

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

T_{stg}	Storage Temperature	-55~150 $^{\circ}\text{C}$
T_j	Junction Temperature	150 $^{\circ}\text{C}$
P_C	Collector Dissipation($T_c=25^{\circ}\text{C}$)	40W
V_{CBO}	Collector-Base Voltage	450V
V_{CEO}	Collector-Emitter Voltage	400V
V_{EBO}	Emitter-Base Voltage	10V
I_C	Collector Current	7A
I_b	Base Current	2A

TO-220



1—Base, B
2—Collector, C
3—Emitter, E

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

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	450			V	$I_C=1\text{mA}$, $I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	400			V	$I_C=100\text{mA}$, $I_B=0$
BV_{EBO}	Emitter-Base Breakdown Voltage	10			V	$I_E=1\text{mA}$, $I_C=0$
I_{CBO}	Collector Cut-off Current			100	μA	$V_{\text{CB}}=450\text{V}$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			100	μA	$V_{\text{EB}}=10\text{V}$, $I_C=0$
$H_{\text{FE}}(1)$	DC Current Gain	15		55		$V_{\text{CE}}=5\text{V}$, $I_C=0.8\text{A}$
$H_{\text{FE}}(2)$		10				$V_{\text{CE}}=5\text{V}$, $I_C=2\text{A}$
$H_{\text{FE}}(3)$		10				$V_{\text{CE}}=5\text{V}$, $I_C=4\text{A}$
$V_{\text{CE(sat)}}$	Collector- Emitter Saturation Voltage			0.8	V	$I_C=4\text{A}$, $I_B=0.8\text{A}$
$V_{\text{BE(sat)}}$	Base-Emitter Saturation Voltage			1.2	V	$I_C=4\text{A}$, $I_B=0.8\text{A}$

h_{FE} Classification

A	B1	B2	B3	B4
15—28	22—35	29—42	36—49	43—55