

Equivalent circuit

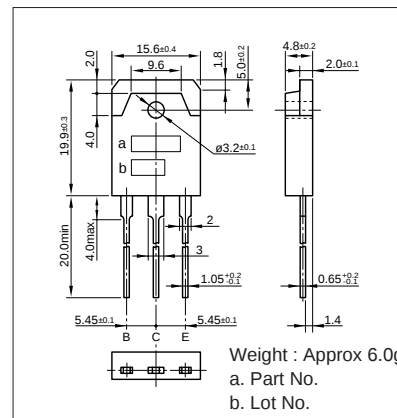
The equivalent circuit consists of a PNP transistor with its base connected to terminal B and its emitter connected to the base of an NPN transistor. The emitter of the NPN transistor is connected to a 70Ω resistor, which is then connected to terminal E. The collector of the PNP transistor is connected to terminal C.

Application : Audio, Series Regulator and General Purpose

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

Symbol	Conditions	Ratings	Unit
ICBO	$V_{CB}=150V$	100max	μA
IEBO	$V_{EB}=5V$	100max	μA
$V_{(BR)CEO}$	$I_C=30mA$	150min	V
h_{FE}	$V_{CE}=4V, I_C=10A$	5000min*	
$V_{CE(sat)}$	$I_C=10A, I_B=10mA$	2.5max	V
$V_{BE(sat)}$	$I_C=10A, I_B=10mA$	3.0max	V
f_T	$V_{CE}=12V, I_E=-2A$	70typ	MHz
COB	$V_{CB}=10V, f=1MHz$	120typ	pF

External Dimensions MT-100(TO3P)



VCC (V)	RL (Ω)	IC (A)	VBB1 (V)	VBB2 (V)	IB1 (mA)	IB2 (mA)	ton (μs)	tstg (μs)	tf (μs)
40	4	10	10	-5	10	-10	0.8typ	4.0typ	1.2typ

