



1W OUTPUT AMPLIFIER OF PORTABLE RADIOS IN CLASS

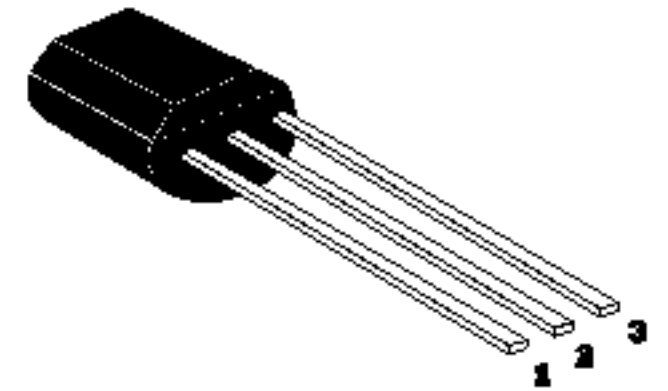
B PUSH-PULL OPERATION.

- * Complement to S9012
- * Collector Current : $I_c=500\text{mA}$
- * High Total Power Dissipation: $p_t=625\text{mW}$

ABSOLUTE MAXIMUM RATINGS at $T_{amb}=25^\circ\text{C}$

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{cbo}	40	V
Collector-Emitter Voltage	V_{ceo}	20	V
Emitter-Base Voltage	V_{ebo}	5	V
Collector Current	I_c	500	mA
Collector Dissipation	P_c	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~150	$^\circ\text{C}$

Package: TO-92



PIN:	1	2	3
STYLE			
NO.1	E	B	C

ELECTRICAL CHARACTERISTICS at $T_{amb}=25^\circ\text{C}$

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{cbo}	40			V	$I_c=100\mu\text{A}$ $I_e=0$
Collector-Emitter Breakdown Voltage	BV_{ceo}	20			V	$I_c=1\text{mA}$ $I_b=0$
Emitter-Base Breakdown Voltage	BV_{ebo}	5			V	$I_e=100\mu\text{A}$ $I_c=0$
Collector Cutoff Current	I_{cbo}			100	nA	$V_{cb}=25\text{V}$ $I_e=0$
Emitter Cutoff Current	I_{ebo}			100	nA	$V_{eb}=3\text{V}$ $I_c=0$
DC Current Gain	H_{fe1}	64	120	300		$V_{ce}=1\text{V}$ $I_c=50\text{mA}$
DC Current Gain	H_{fe2}	30				$V_{ce}=1\text{V}$ $I_c=500\text{mA}$
Collector-Emitter Saturation Voltage	$V_{ce(sat)}$		0.16	0.6	V	$I_c=500\text{mA}$ $I_b=50\text{mA}$
Base-Emitter Saturation Voltage	$V_{be(sat)}$		0.91	1.2	V	$I_c=500\text{mA}$ $I_b=50\text{mA}$
Base-Emitter On Voltage	$V_{be(on)}$	0.6	0.67	0.7	V	$V_{ce}=1\text{V}$ $I_c=10\text{mA}$

CLASSIFICATION HFE

Classification	D	F	G	H	I
H_{fe1}	64-96	96-135	112-166	144-202	202-300