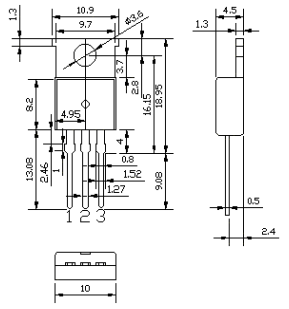
NPN SILICON TRIPLE DIFFSUED TRANSISTOR

…designed for audio frequency power amplifier applications.

TO-220AB



1 : Base
2 : Collector (Heat Sink)
3 : Emitter

Weight: 1.9g Unit in mm

MAXIMUM RATINGS (Ta = 25 °C)

Characteristic	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	60	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current	I_C	3	A
Base Current	I_B	0.5	A
Collector Power Dissipation T_a = 25 °C	P_C	1.5	W
Collector Power Dissipation T_c = 25 °C	P_C	30	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}=60V, I_E=0	-	-	100	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=7V, I_B=0	-	-	100	μA
Collector Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=50mA, I_B=0	60	-	-	V
DC Current Gain	h_{FE}	V_{CE}=5V, I_C =0.5A	60	-	300	-
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	I_C =3A, I_B=0.3A	-	0.25	1	V
Base Emitter Voltage	V_{BE}	V_{CE} =5V, I_C =0.5A	-	0.7	1	V
Transition Frequency	f_T	V_{CE} =5V, I_C =0.5A	-	3	-	MHz
Collector Output Capacitance	C_{ob}	V_{CE} =10V, I_E=0, f=1MHz	-	70	-	pF
Switching Time						
Turn On Time	t_{on}		-	0.8	-	μs
Storage Time	t_{stg}		-	1.5	-	μs
Fall Time	t_f		-	0.8	-	μs

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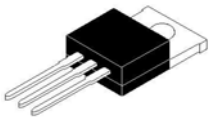

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CLASSIFICATIONS OF h_{FE}

Rank	O	Y	GR
Range	60 to 120	100 to 200	150 to 300