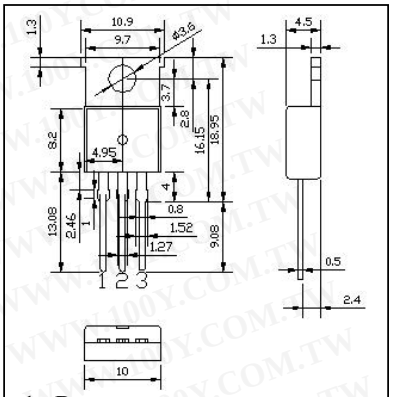
TRIPLE DIFFUSED SILICON NPN TRANSISTOR

… designed for low frequency power amplifier



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

Unit in mm
TO-220AB Weight: 1.9g

MAXIMUM RATINGS

Characteristic	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	100	V
Collector Emitter Voltage	V_{CEO}	80	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	4	A
Collector Current (Peak)	I_C	8	A
Collector power Dissipation	P_C	40	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55~150	°C

ELECTRICAL CHARACTERISTICS

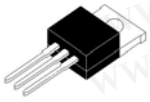
Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cut Off Current	I_{CBO}	V_{CB} = 80V, I_E = 0A	-	-	100	μA
Collector – Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 50mA, I_B = 0A	80	-	-	V
DC Current Gain	h_{FE}	V_{CE} = 4V, I_C = 1A	60	-	200	-
		V_{CE} = 4V, I_C = 0.1A	35	-	-	-
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 2A, I_B = 0.2A	-	-	1	V
Base Emitter Voltage	V_{BE}	V_{CE} = 4V, I_C = 1A	-	-	1.5	V
Transition Frequency	f_T	V_{CE} = 5V, I_C = 0.5A	-	10	-	MHz
Collector Out put Capacitance	C_{ob}	V_{CB} = 20V, I_E = 0A, f=1MHz	-	40	-	Pf

HIGH POWER DISSIPATION

MEDIUM SPEED POWER SWITCHING

Classification of h_{FE}

Rank	B	C
Range	60 to 120	100-200



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