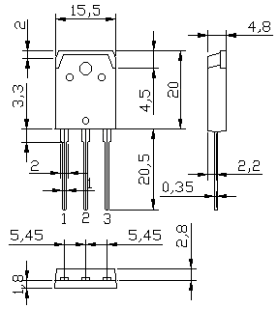
NPN SILICON TRIPLE DIFFUSED TRANSISTOR

…designed for power amplifier applications.

FEATURE:

- High Collector Breakdown Voltage: V_{CEO}= 180V (Min.)
- Complementary to PMA1516
- Recommend for 80W High Fiderity Audio Frequency Amplifier Output Stage.



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

Unit in mm
TO-3PI Weight: 4.5g

MAXIMUM RATINGS (T_a = 25 °C)

Characteristic	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	180	V
Collector Emitter Voltage	V_{CEO}	180	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	12	A
Base Current	I_B	1.2	A
Collector power Dissipation T_c= 25 °C	P_C	130	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (T_a = 25 °C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}= 180V, I_E=0	-	-	5	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	5	μA
Collector Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=50mA, I_B=0	180	-	-	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=5V, I_C=1A	55	-	180	-
	$h_{FE(2)}$	V_{CE}=5V, I_C=7A	35	70	-	-
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=8A, I_B=0.8A	-	0.3	2	V
Base Emitter Voltage	V_{BE}	V_{CE}=5V, I_C=7A	-	1	1.5	V
Transition Frequency	f_T	V_{CE}=5V, I_E=1A	-	30	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	270	-	pF

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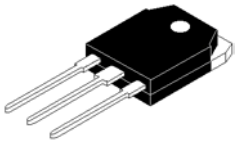

TO-3PI

Classification of $h_{FE(1)}$

Class	R	O
$h_{FE(1)}$	55 to 110	90 to 180