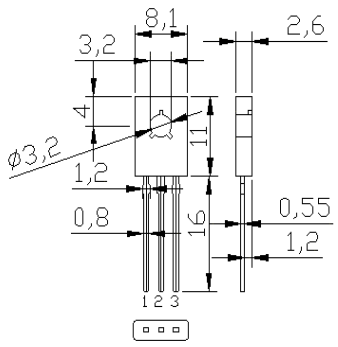
PNP SILICON POWER TRANSISTOR

…designed for output stage of 3 watts audio amplifier, voltage regulator, DC-DC converter and relay driver.



1 : Emitter
2 : Collector
3 : Base

Unit in mm
TO-126 Weight: 0.85g

MAXIMUM RATINGS (Ta = 25 °C)

Characteristic	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	-40	V
Collector Emitter Voltage	V_{CEO}	-30	V
Emitter Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	$I_{C(DC)}$	-3	A
Collector Current (Pulse)	$I_{C(Pulse)}$*	-7	A
Total Power Dissipation	P_{tot}		W
T_a=25°C		1	
T_c=25°C		10	
Storage Temperature	T_{stg}	-55 ~ 150	°C
Junction Temperature	T_j	150	°C

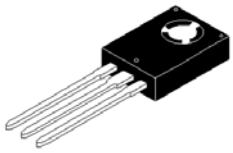
*Pulse Test PW ≤ 350μs, Duty Cycle ≤ 2%

PNP SILICON POWER TRANSISTOR

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} =-30V, I_E =0	-	-	-1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} =-3.0V, I_C =0	-	-	-1	μA
Collector Saturation Voltage	$V_{CE(sat)}$	I_C =-2.0A, I_B =-0.2A**	-	-0.3	-0.5	V
Base Saturation Voltage	$V_{BE(sat)}$	I_C =-2.0A, I_B =-0.2A**	-	-1	-2	V
DC Current Gain	h_{FE1}	V_{CE}=-2.0V, I_C=-20mA**	30	220	-	-
DC Current Gain	h_{FE2}	V_{CE} =-2.0V, I_C =-1.0A**	60	160	400	-
Gain Bandwidth Product	f_T	V_{CE} =-50V, I_C =-0.1A	-	80	-	MHz
Output Capacitance	C_{ob}	V_{CB} =-10V, I_E =0, f=1.0MHz	-	55	-	pF

**Pulse Test: PW ≤ 350μs, Duty Cycle ≤ 2%



TO-126

Classification of $h_{FE(2)}$

Class	R	Q	P	E
$h_{FE(2)}$	60 to 120	100 to 200	160 to 320	200 to 400

PMC reserves the right to make changes without further notice to any products herein. **PMC** makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does **PMC** assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential damages. The examples of applied circuits are provided as reference to the reader therefore we shall not undertake any responsibility for the exercise of rights by third parties.

© **PMC Components Pte Ltd.**, Singapore, 2000