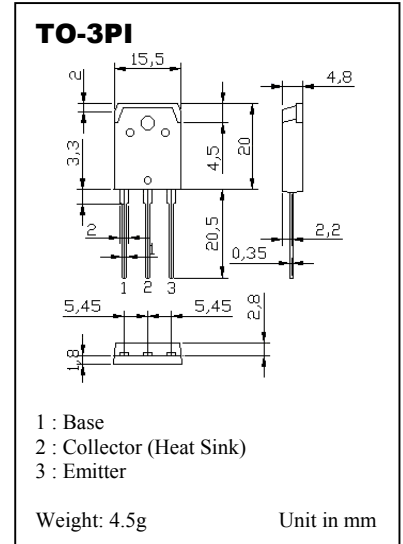


NPN SILICON POWER TRANSISTOR

...complementary to BD246.

MAXIMUM RATINGS (T_c = 25 °C)

Characteristic	Symbol	Value	Unit
Collector Emitter Voltage (R _{BE} =100Ω)	V _{CER}	55	V
Collector Emitter Voltage (I _c =30mA)	V _{CEO}	45	V
Emitter Base Voltage	V _{EBO}	5	V
Collector Current	I _c	10	A
Collector Current (Peak)	I _{CM}	15	A
Base Current	I _B	3	A
Total Power Dissipation T _a =25°C	P _{tot}	3	W
Total Power Dissipation T _c =25°C	P _{tot}	80	W
Junction Temperature Range	T _j	-65 ~ 150	°C
Storage Temperature Range	T _{stg}	-65 ~ 150	°C

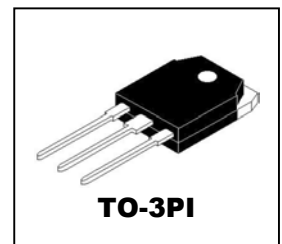


ELECTRICAL CHARACTERISTICS (T_c = 25 °C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Emitter Cutoff Current	I _{CES}	V _{CE} =55V, V _{BE} =0	-	-	0.4	mA
Collector Cutoff Current	I _{CEO}	V _{CE} =30V, I _B =0	-	-	0.7	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V, I _C =0	-	-	1	mA
Collector Emitter Breakdown Voltage	V _{(BR)CEO}	I _B =0, I _C =30mA	45	-	-	V
DC Current Gain	h _{FE} *	V _{CE} =4V, I _C =1A	40	-	-	-
		V _{CE} =4V, I _C =3A	20	-	-	-
		V _{CE} =4V, I _C =10A	4	-	-	-
Small Signal Current Gain	h _{fe}	V _{CE} =10V, I _C =0.5A, f=1kHz	20	-	-	-
		V _{CE} =10V, I _C =0.5A, f=1MHz	3	-	-	-
Collector Emitter Saturation Voltage	V _{CE(sat)} *	I _B =0.3A, I _C =3A	-	-	1	V
		I _B =2.5A, I _C =10A	-	-	4	V
Base Emitter Voltage	V _{BE} *	V _{CE} =4V, I _C =3A	-	-	1.6	V
		V _{CE} =4V, I _C =10A	-	-	3	V

*t_p=300μs, Duty cycle≤2%.

**NPN SILICON
POWER
TRANSISTOR**



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