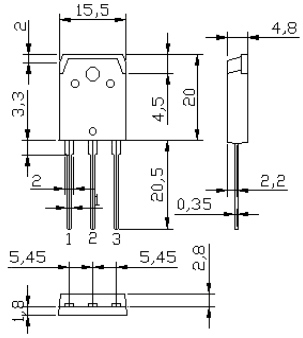
NPN SILICON POWER TRANSISTOR

…complementary to BD246C.

TO-3PI



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

Weight: 4.5g Unit in mm

MAXIMUM RATINGS (T_C = 25 °C)

Characteristic	Symbol	Value	Unit
Collector Emitter Voltage (R_{BE}=100Ω)	V_{CER}	115	V
Collector Emitter Voltage (I_C=30mA)	V_{CEO}	100	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}=115V, V_{BE}=0	-	-	0.4	mA
Collector Cutoff Current	I_{CEO}	V_{CE}=60V, 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	100	-	-	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%.

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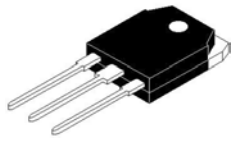

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