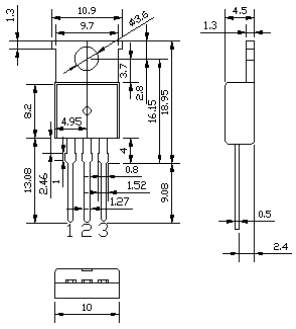
NPN MULTIEPITAXIAL HIGH VOLTAGE FAST SWITCHING TRANSISTOR

… designed for electronic ballasts for fluorescent lighting.
… designed for switching mode power supplies.

TO-220AB



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

Weight: 1.9g Unit in mm

MAXIMUM RATINGS (Ta = 25 °C)

Characteristic	Symbol	Value	Unit
Collector Emitter Voltage (V_{BE}=0)	V_{CES}	1500	V
Collector Emitter Voltage (I_B=0)	V_{CEO}	700	V
Collector Current	I_C	2.5	A
Collector Peak Current (tp<5ms)	I_{CM}	4	A
Base Current	I_B	1	A
Base Peak Current (tp<5ms)	I_{BM}	2	A
Total Dissipation $T_c \leq 25°C$	P_{tot}	75	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65 ~ 150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector Cutoff Current (V_{BE}=0)	I_{CES}	V_{CE} = 1500V	-	-	0.15	mA
		V_{CE} = 1500V, T_c=125°C	-	-	1	mA
Emitter Cutoff Current (I_C=0)	I_{EBO}	V_{EB} = 5V	-	-	1	mA
Second Breakdown Current	$I_{s/b}$	V_{CE} =120V, t=200μs	2	-	-	A
Collector Emitter Saturation Voltage	$V_{CE(sat)}$*	I_C = 2A, I_B = 0.9A	-	-	5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$*	I_C = 2A, I_B = 0.9A	-	-	1.3	V
Collector Emitter Sustaining Voltage (I_B=0)	$V_{CEO(sus)}$*	I_C = 100mA, L=25mH	700	-	-	V
Inductive Load Storage Time	t_s	V_{clamp}=250V, I_C=2A, I_{B1}=0.7A, $V_{BE(off)}$=-5V,	-	2	-	μs
Fall Time	t_f	R_{bb}=0, L=200μH	-	350	-	ns

*Pulse Test: Pulse duration=300μs, duty cycle 1.5%.

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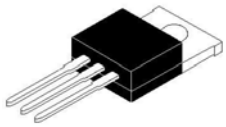

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