

2N6387/2N6388

THERMAL DATA

R _{thj-case}	Thermal Resistance Junction-case	Max	1.92	°C/W
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ELECTRICAL CHARACTERISTICS (T_{case} = 25 °C unless otherwise specified)

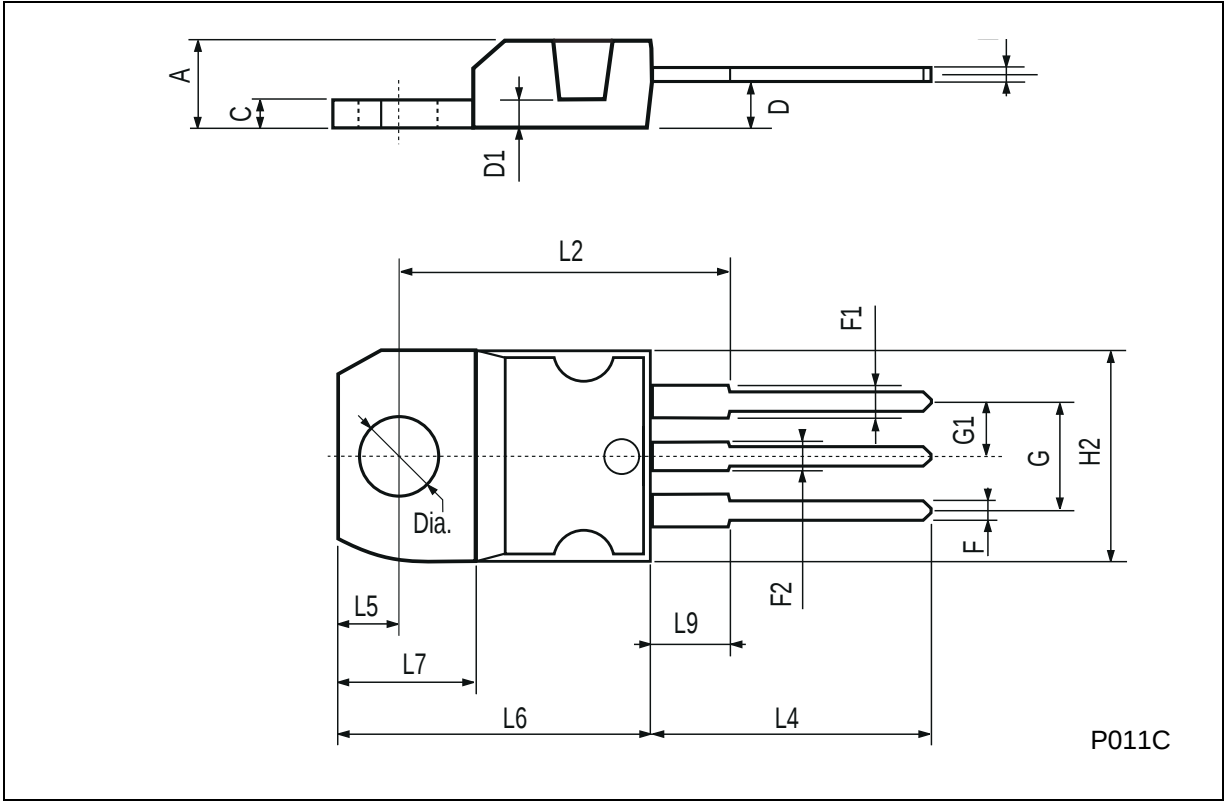
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I _{CEV}	Collector Cut-off Current (V _{BE} = -1.5V)	V _{CE} = rated V _{CEO} V _{CE} = rated V _{CEO} T _C = 125 °C			0.3 3	mA mA
I _{CEO}	Collector Cut-off Current (I _B = 0)	for 2N6387 V _{CE} = 60 V for 2N6388 V _{CE} = 80 V			1 1	mA mA
I _{EBO}	Emitter Cut-off Current (I _C = 0)	V _{EB} = 5 V			5	mA
V _{CEO(sus)*}	Collector-Emitter Sustaining Voltage	I _C = 200 mA for 2N6387 for 2N6388	60 80			V V
V _{CER(sus)*}	Collector-Emitter Sustaining Voltage	I _C = 200 mA R _{BE} = 100 Ω for 2N6387 for 2N6388	60 80			V V
V _{CEV(sus)*}	Collector-Emitter Sustaining Voltage	I _C = 200 mA V _{BE} = -1.5V for 2N6387 for 2N6388	60 80			V V
V _{CE(sat)*}	Collector-Emitter Saturation Voltage	I _C = 5 A I _B = 10 mA I _C = 10 A I _B = 100 mA			2 3	V V
V _{BE*}	Base-Emitter Voltage	I _C = 5 A V _{CE} = 3 V I _C = 10 A V _{CE} = 3 V			2.8 4.5	V V
h _{FE*}	DC Current Gain	I _C = 5 A V _{CE} = 3 V I _C = 10 A V _{CE} = 3 V	1000 100		20000	
h _{fe}	Small Signal Current Gain	I _C = 1 A V _{CE} = 10 V f = 1MHz I _C = 1 A V _{CE} = 10 V f = 1KHz	20 1000			
V _{F*}	Parallel-diode Forward Voltage	I _F = 10 A			4	V
C _{CBO}	Collector Base Capacitance	I _E = 0 V _{CB} = 10 V f = 1MHz			200	pF
I _{s/b**}	Second Breakdown Collector Current	V _{CE} = 25 V	2.6			A
E _{s/b}	Second Breakdown Energy	L = 12 mH R _{BE} = 100 Ω V _{BE} = -1.5 V I _C = 4.5 A	120			mJ

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

** Pulsed: 1s non repetitive pulse.

TO-220 MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	4.40		4.60	0.173		0.181
C	1.23		1.32	0.048		0.051
D	2.40		2.72	0.094		0.107
D1		1.27			0.050	
E	0.49		0.70	0.019		0.027
F	0.61		0.88	0.024		0.034
F1	1.14		1.70	0.044		0.067
F2	1.14		1.70	0.044		0.067
G	4.95		5.15	0.194		0.203
G1	2.4		2.7	0.094		0.106
H2	10.0		10.40	0.393		0.409
L2		16.4			0.645	
L4	13.0		14.0	0.511		0.551
L5	2.65		2.95	0.104		0.116
L6	15.25		15.75	0.600		0.620
L7	6.2		6.6	0.244		0.260
L9	3.5		3.93	0.137		0.154
DIA.	3.75		3.85	0.147		0.151



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