

NPN 2N3773

HIGH POWER TRANSISTOR

The 2N3773 is silicon planar NPN transistor in Jedec TO-3 metal case. They are intended for linear amplifiers and inductive switching applications. Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V _{CEO}	Collector-Emitter Voltage	$I_B = 0$	140	V
V_{CBO}	Collector-Base Voltage	$I_E = 0$	160	V
V_{EBO}	Emitter-Base Voltage	$I_C = 0$	7	٧
V _{CEX}	Collector-Emitter Voltage	$V_{BE} = -1.5V$	160	V
Ic	Collector Current		16	Α
I _{CM}	Collector Peak Current		30	Α
I _B	Base Current		4	Α
I _{BM}	Base Peak Current		15	Α
Pt	Total Power Dissipation	$@ T_C = 25^\circ$	150	W
TJ	Junction Temperature		150	°C
T _{Stg}	Storage Temperature		-65 to +200	°C

ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Тур	Max	Unit
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage (*)	I _C = 200 mA, I _B = 0	140	-	-	V
I _{CEO}	Collector Cutoff Current	$V_{CE} = 140 \text{ V}, I_{B} = 0$	-	-	2	mA
I _{CEX}	Collector Cutoff Current	V _{CE} = 140 V, V _{BE} = -1.5V	-	-	2	mA
		V_{CE} = 140 V, V_{BE} = -1.5V T_{case} = 150°C	-	-	10	
I _{EBO}	Emitter Cutoff Current	$V_{EB} = 7 \text{ V}, I_{C} = 0$	-	-	5	mA
h _{FE}	DC Current Gain (*)	I_C = 8 A, V_{CE} = 4 V	15	-	60	
		I_{C} = 16 A, V_{CE} = 4 V	5	-	-	
VOE(OAT)	Collector-Emitter saturation	I_{C} = 8 A, I_{B} = 800 mA	-	-	1.4	V
	Voltage (*)	I_{C} = 16 A, I_{B} = 3.2 A	-	-	4	V
V _{BE}	Base-Emitter Voltage (*)	I _C = 8 A, V _{CE} = 4 V	-	-	2.2	V
I _{S/B}	Second breakdown collector current	$V_{CE} = 100 \text{ V}, t_s = 1 \text{ s}$	1.5	-	-	А

^(*) Pulse Duration = 300 μs, Duty Cycle <= 2%



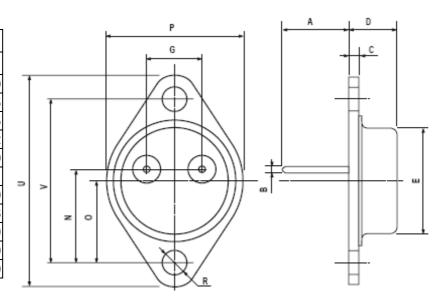
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THERMAL CHARACTERISTICS

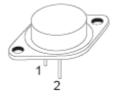
Symbol	Ratings	Value	Unit
R_{thJC}	Thermal Resistance, Junction to Case	1.17	°C/W

MECHANICAL DATA CASE TO-3

DIMENSIONS (mm)		
	min	max
Α	11	13.10
В	0.97	1.15
С	1.5	1.65
D	8.32	8.92
F	19	20
G	10.70	11.1
N	16.50	17.20
Р	25	26
R	4	4.09
U	38.50	39.30
V	30	30.30
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Pin 1 :	Base
Pin 2 :	Emitter
Case:	Collector



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www.comsetsemi.com

info@comsetsemi.com