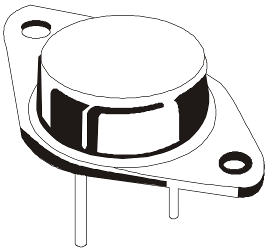
NPN SILICON PLANAR POWER TRANSISTOR

2N3773



TO-3
Metal Can Package

Complementary 2N6609

General Purpose Amplifier specially suited for Power Conditioning Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	V_{CBO}	160	V
Collector Emitter Voltage	V_{CEO}	140	V
Collector Emitter Voltage	V_{CEX}	160	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current Continuous Peak (1)	I_C	16 30	A A
Base Current Continuous Peak (1)	I_B	4 15	A A
Power Dissipation @ T_c=25ºC Derate Above 25ºC	P_D	150 0.855	W W/ºC
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200	ºC

THERMAL RESISTANCE

Junction to Case	$R_{th(j-c)}$	1.17	ºC/W

(1) Pulse Test: Pulse Width =5ms, Duty Cycle≤10%

ELECTRICAL CHARACTERISTICS (T_C=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Collector Emitter Sustaining Voltage	$V_{CEO\ (sus)}$*	I_C=0.2A, I_B=0	140		V
Collector Emitter Sustaining Voltage	$V_{CEX\ (sus)}$ *	I_C=0.1A, R_{BE}=100Ω,V_{BE}(off)=1.5V	160		V
Collector Emitter Sustaining Voltage	$V_{CER\ (sus)}$ *	I_C=0.2A, R_{BE}=100Ω	150		V
Collector Cut Off Current	I_{CEO}	V_{CE}=120V, I_B=0		10	mA
Collector Cut Off Current	I_{CEX}	V_{CE}=140V, V_{BE}(off)=1.5V T_c=150ºC V_{CE}=140V, V_{BE}(off)=1.5V		2.0 10	mA mA
Collector Cut Off Current	I_{CBO}	V_{CB}=140V, I_E=0		2.0	mA
Emitter Cut Off Current	I_{EBO}	V_{BE}=7V, I_C=0		5.0	mA
DC Current Gain	h_{FE}*	I_C=8A, V_{CE}=4V I_C=16A, V_{CE}=4V	15 5	60	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$ *	I_C=8A, I_B=800mA I_C=16A, I_B=3.2A		1.4 4.0	V V
Base Emitter on Voltage	$V_{BE(on)}$*	I_C=8A, V_{CE}=4V		2.2	V

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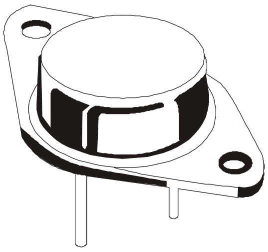


2N3773

TO-3
Metal Can Package

ELECTRICAL CHARACTERISTICS (T_C=25ºC unless specified otherwise)

Dynamic Characteristics

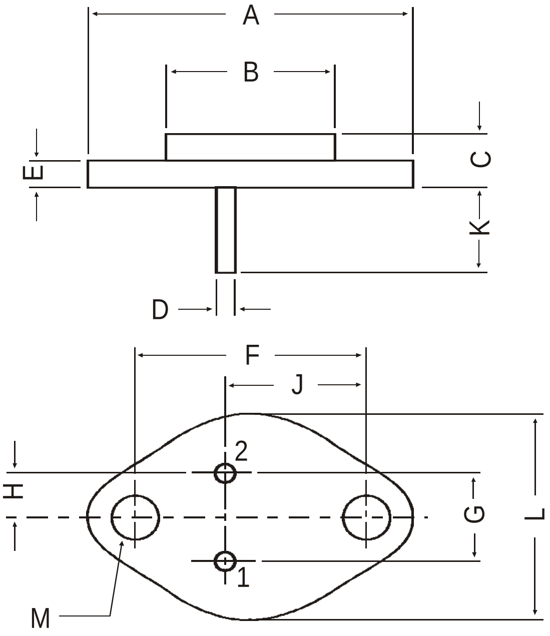
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Magnitude of Common Emitter Small Signal,Short Circuit, Forward Current Transfer Ratio	$\lvert h_{fe} \rvert$	I_C=1A, f=50KHz	4.0		
Small Signal Current Gain	h_{fe}	I_C=1A, V_{CE}=4V, f=1KHz	40		

Second Breakdown Characteristics

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Second Breakdown Collector Current With Base Forward Biased	I_S/b	V_{CE}=100V, t=1.0 s, Nonrepetitive	1.5		A

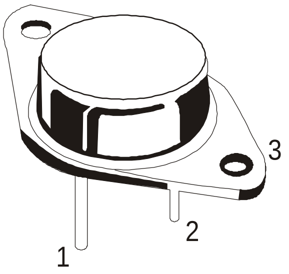
***Pulse Test: Pulse Width =300ms, Duty Cycle≤2%**

TO-3 Metal Can Package



DIM	MIN.	MAX.
A	—	39.37
B	—	22.22
C	6.35	8.50
D	0.96	1.09
E	—	1.77
F	29.90	30.40
G	10.69	11.18
H	5.20	5.72
J	16.64	17.15
K	11.15	12.25
L	—	26.67
M	3.84	4.19

All dimensions in mm.



PIN CONFIGURATION
1. BASE
2. EMITTER
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-3	100 pcs/pkt	1.3 kg/100 pcs	12.5" x 8" x 1.8"	0.1K	17" x 11.5" x 21"	2K	27.5 kgs

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