2N3789 2N3791
2N3790 2N3792

SILICON
PNP POWER TRANSISTORS

TO-3 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N3789, 2N3790, 2N3791, and 2N3792 are silicon PNP power transistors, manufactured by the epitaxial planar process, designed for medium speed switching and amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C)	**SYMBOL**	**2N3789 2N3791**	**2N3790 2N3792**	**UNITS**
Collector-Base Voltage	V_{CBO}	60	80	V
Collector-Emitter Voltage	V_{CEO}	60	80	V
Emitter-Base Voltage	V_{EBO}	7.0		V
Continuous Collector Current	I_C	10		A
Continuous Base Current	I_B	4.0		A
Power Dissipation	P_D	150		W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		°C
Thermal Resistance	Θ_{JC}	1.17		°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

		2N3789 2N3791		**2N3790 2N3792**		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{CEV}	V_{CE}=Rated V_{CEO}, V_{EB}=1.5V	-	1.0	-	1.0	mA
I_{CEV}	V_{CE}=Rated V_{CEO}, V_{EB}=1.5V, T_C=150°C	-	5.0	-	5.0	mA
I_{EBO}	V_{EB}=7.0V	-	5.0	-	5.0	mA
BV_{CEO}	I_C=200mA	60	-	80	-	V
$V_{CE(SAT)}$	I_C=4.0A, I_B=400mA (2N3789, 2N3790)	-	1.0	-	1.0	V
$V_{CE(SAT)}$	I_C=5.0A, I_B=500mA (2N3791, 2N3792)	-	1.0	-	1.0	V
$V_{BE(ON)}$	V_{CE}=2.0V, I_C=5.0A (2N3789, 2N3790)	-	2.0	-	2.0	V
$V_{BE(ON)}$	V_{CE}=2.0V, I_C=5.0A (2N3791, 2N3792)	-	1.8	-	1.8	V
$V_{BE(ON)}$	V_{CE}=4.0V, I_C=10A	-	4.0	-	4.0	V
h_{FE}	V_{CE}=2.0V, I_C=1.0A (2N3789, 2N3790)	25	90	25	90	
h_{FE}	V_{CE}=2.0V, I_C=1.0A (2N3791, 2N3792)	50	180	50	180	
h_{FE}	V_{CE}=2.0V, I_C=3.0A (2N3789, 2N3790)	15	-	15	-	
h_{FE}	V_{CE}=2.0V, I_C=3.0A (2N3791, 2N3792)	30	-	30	-	
f_T	V_{CE}=10V, I_C=500mA, f=1.0MHz	4.0	-	4.0	-	MHz

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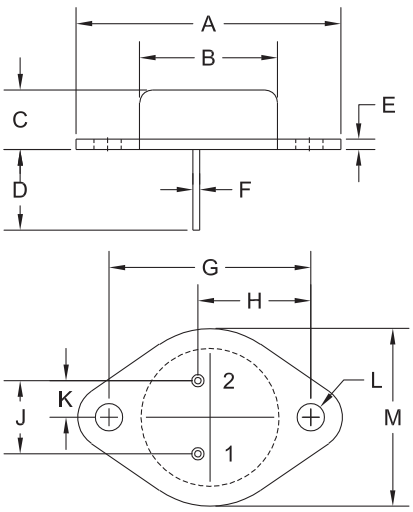
TO-3 CASE - MECHANICAL OUTLINE



R2

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	1.516	1.573	38.50	39.96
B (DIA)	0.748	0.875	19.00	22.23
C	0.250	0.450	6.35	11.43
D	0.433	0.516	11.00	13.10
E	0.054	0.065	1.38	1.65
F	0.035	0.045	0.90	1.15
G	1.177	1.197	29.90	30.40
H	0.650	0.681	16.50	17.30
J	0.420	0.440	10.67	11.18
K	0.205	0.225	5.21	5.72
L (DIA)	0.151	0.172	3.84	4.36
M	0.984	1.050	25.00	26.67

TO-3 (REV: R2)

LEAD CODE:
1) Base
2) Emitter
Case) Collector

MARKING:
FULL PART NUMBER

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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