

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors
www.centralsemi.com

2N3789
2N3790
2N3791
2N3792

PNP POWER TRANSISTORS

JEDEC TO-3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3789 Series types are silicon power transistors manufactured by the epitaxial planar process and designed for medium speed switching and amplifier applications.

MAXIMUM RATINGS (T_C=25°C unless otherwise noted)

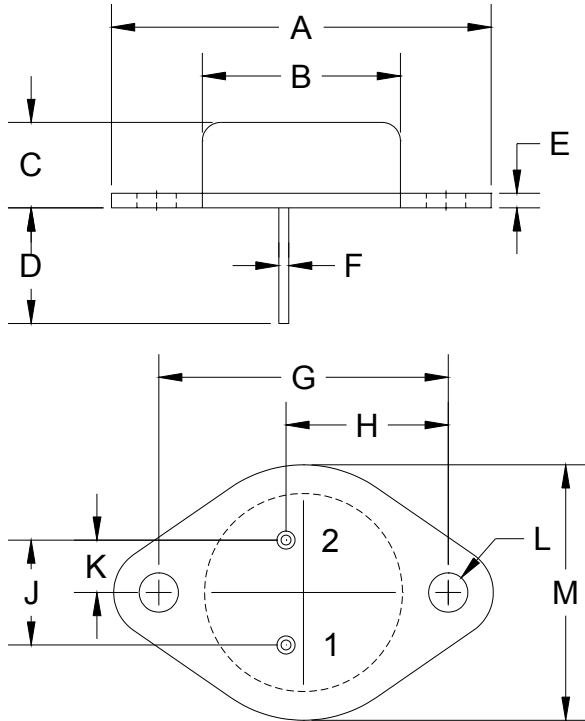
	SYMBOL	2N3789		2N3790		UNITS
		2N3791		2N3792		
Collector-Base Voltage	V _{CBO}	60		80		V
Collector-Emitter Voltage	V _{CEO}	60		80		V
Emitter-Base Voltage	V _{EBO}		7.0			V
Collector Current	I _C		10			A
Base Current	I _B		4.0			A
Power Dissipation	P _D		150			W
Operating and Storage Junction Temperature	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)

SYMBOL	TEST CONDITIONS	2N3789		2N3790		UNITS
		2N3791		2N3792		
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

(SEE REVERSE SIDE)

TO-3 PACKAGE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	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)

R2

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