

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors
www.centrasemi.com

MPS455

NPN TRANSISTOR

TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPS455 is a silicon NPN Medium Power Transistor, manufactured by the epitaxial planar process, designed for general purpose amplifier and switching applications.

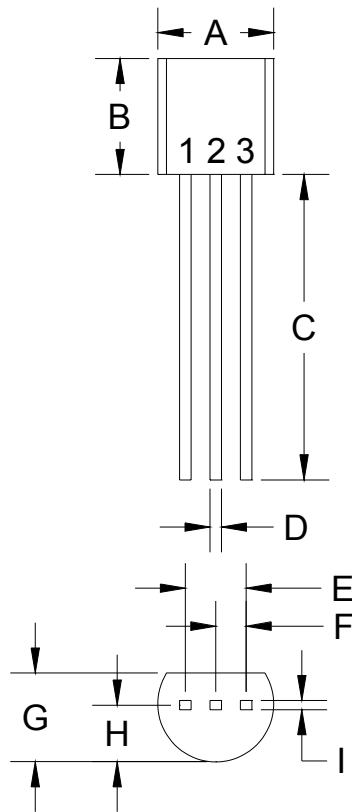
MAXIMUM RATINGS (T_A=25°C)

	<u>SYMBOL</u>		<u>UNITS</u>
Collector-Base Voltage	V _{CB0}	160	V
Collector-Emitter Voltage	V _{CEO}	140	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	1.0	A
Peak Collector Current	I _{CM}	2.0	A
Power Dissipation	P _D	1.0	W
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	125	°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
I _{CB0}	V _{CB} =140V			0.1	μA
I _{EBO}	V _{EB} =4.0V			0.1	μA
BV _{CB0}	I _C =100μA	160			V
BV _{CEO}	I _C =10mA	140			V
BV _{EBO}	I _E =100μA	5.0			V
V _{CE(SAT)}	I _C =150mA, I _B =15mA			0.70	V
h _{FE}	V _{CE} =10V, I _C =150mA	100		300	
h _{FE}	V _{CE} =10V, I _C =1.0A		10		
f _T	V _{CE} =10V, I _C =50mA, f=100MHz	100			MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz			15	pF

(SEE REVERSE SIDE)

TO-92 PACKAGE - MECHANICAL OUTLINE

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

TO-92 (REV: R1)

Lead Code: 1) Emitter
2) Base
3) Collector

R1

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