

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors
www.centrasemi.com

MPSA75
MPSA76
MPSA77

PNP DARLINGTON TRANSISTOR

TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPSA75 series are silicon PNP Darlington Transistors, manufactured by the epitaxial planar process, designed for applications requiring extremely high gain.

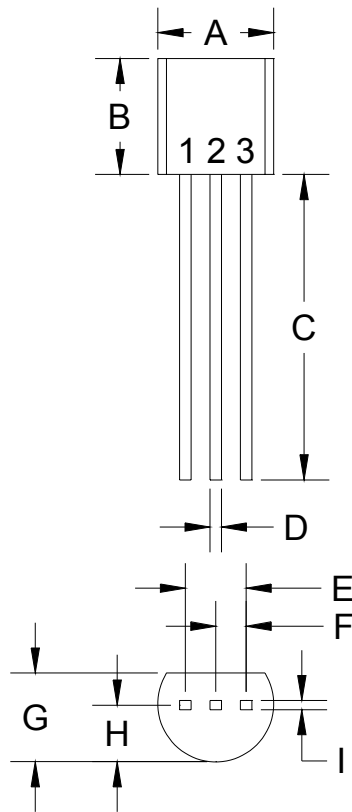
MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	MPSA75	MPSA76	MPSA77	UNITS
Collector-Emitter Voltage	V _{CES}	40	50	60	V
Collector-Base Voltage	V _{CBO}	40	50	60	V
Emitter-Base Voltage	V _{EBO}		10		V
Collector Current	I _C		500		mA
Power Dissipation	P _D		625		mW
Operating and Storage Junction Temperature	T _J , T _{stg}		-55 to +150		°C
Thermal Resistance	θ _{JA}		200		°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL	TEST CONDITIONS	MPSA75		MPSA76		MPSA77		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{CES}	V _{CE} =30V		500					nA
I _{CES}	V _{CE} =40V				500			nA
I _{CES}	V _{CE} =50V						500	nA
I _{CBO}	V _{CB} =30V		100					nA
I _{CBO}	V _{CB} =40V				100			nA
I _{CBO}	V _{CB} =50V						100	nA
I _{EBO}	V _{EB} =10V		100		100		100	nA
BV _{CES}	I _C =100μA	40		50		60		V
BV _{CBO}	I _C =100μA	40		50		60		V
V _{CE(SAT)}	I _C =100mA, I _B =0.1mA		1.5		1.5		1.5	V
V _{BE(ON)}	V _{CE} =5.0V, I _C =100mA		2.0		2.0		2.0	V
h _{FE}	V _{CE} =5.0V, I _C =10mA	10K		10K		10K		
h _{FE}	V _{CE} =5.0V, I _C =100mA	10K		10K		10K		
f _T	V _{CE} =5.0V, I _C =10mA	125		125		125		MHz

(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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