MPSA62 MPSA65
MPSA63 MPSA66
MPSA64

SILICON
PNP DARLINGTON TRANSISTORS

TO-92 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR MPSA62 series devices are silicon PNP Darlington transistors, manufactured by the epitaxial planar process, designed for applications requiring extremely high gain.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)	SYMBOL	MPSA63 MPSA62	MPSA65 MPSA64	UNITS MPSA66	UNITS
Collector-Base Voltage	V_{CBO}	20	30	30	V
Collector-Emitter Voltage	V_{CES}	20	30	30	V
Emitter-Base Voltage	V_{EBO}	10	10	8.0	V
Continuous Collector Current	I_C		500		mA
Power Dissipation	P_D		625		mW
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 to +150		°C
Thermal Resistance	Θ_{JA}		200		°C/W

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

		MPSA62		MPSA63		MPSA64		MPSA65		MPSA66		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{CBO}	V_{CB}=15V	-	100	-	-	-	-	-	-	-	-	nA
I_{CBO}	V_{CB}=30V	-	-	-	100	-	100	-	100	-	100	nA
I_{EBO}	V_{EB}=10V	-	100	-	100	-	100	-	-	-	-	nA
I_{EBO}	V_{EB}=8.0V	-	-	-	-	-	-	-	100	-	100	nA
BV_{CES}	I_C=100μA	20	-	30	-	30	-	30	-	30	-	V
$V_{CE(SAT)}$	I_C=10mA, I_B=10μA	-	1.0	-	-	-	-	-	-	-	-	V
$V_{CE(SAT)}$	I_C=100mA, I_B=0.1mA	-	-	-	1.5	-	1.5	-	1.5	-	1.5	V
$V_{BE(ON)}$	V_{CE}=5.0V, I_B=10mA	-	1.4	-	-	-	-	-	-	-	-	V
$V_{BE(ON)}$	V_{CE}=5.0V, I_B=100mA	-	-	-	2.0	-	2.0	-	2.0	-	2.0	V
h_{FE}	V_{CE}=5.0V, I_C=10mA	20K	-	5K	-	10K	-	50K	-	75K	-	
h_{FE}	V_{CE}=5.0V, I_C=100mA	-	-	10K	-	20K	-	20K	-	40K	-	
f_T	V_{CE}=5.0V, I_C=100mA, f=100MHz	-	-	125	-	125	-	-	-	-	-	MHz
f_T	V_{CE}=10V, I_C=30mA, f=50MHz	-	-	-	-	-	-	100	-	100	-	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=100kHz	2.5 (TYP)		2.5 (TYP)		2.5 (TYP)		2.5 (TYP)		2.5 (TYP)		pF
NF	V_{CE}=5.0V, I_C=1.0mA, R_S=100kΩ, f=1.0kHz	2.0 (TYP)		2.0 (TYP)		2.0 (TYP)		2.0 (TYP)		2.0(TYP)		dB

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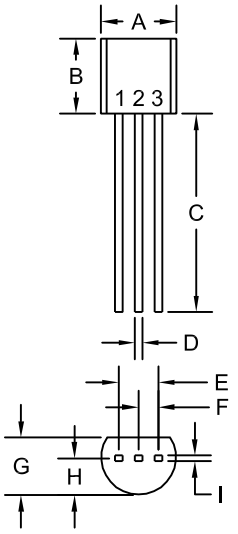
TO-92 CASE - MECHANICAL OUTLINE



R1

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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

MARKING:
FULL PART NUMBER

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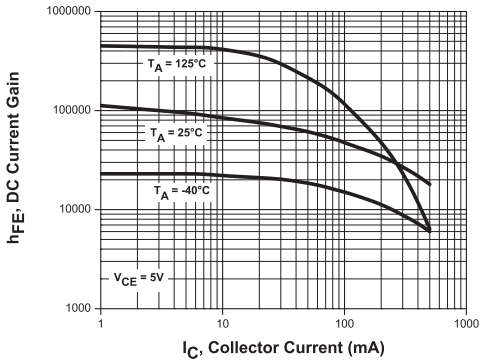
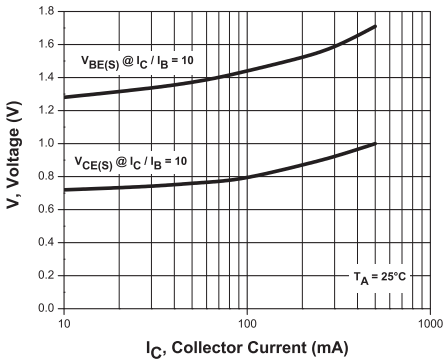
TYPICAL ELECTRICAL CHARACTERISTICS

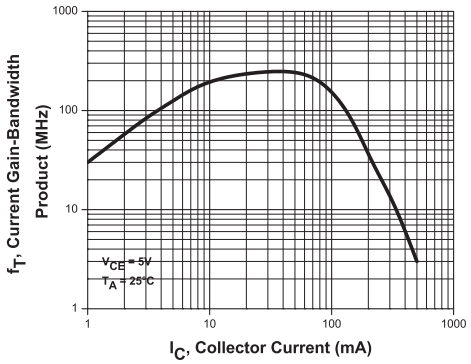
DC Current Gain



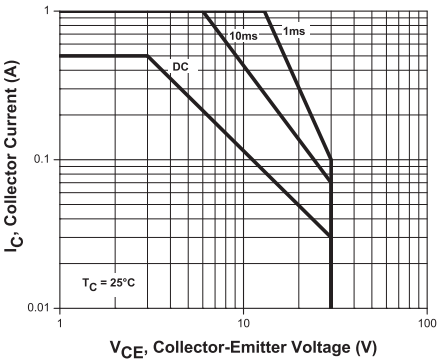
"ON" Voltage



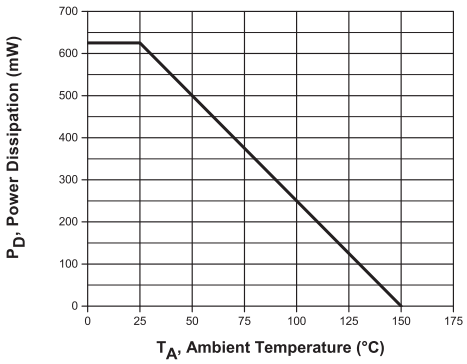
Current Gain-Bandwidth Product



Safe Operating Area



Power Derating



R1 (18-March 2014)

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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Worldwide Distributors:
www.centralsemi.com/wwdistributors

http://www.centralsemi.com

Product End of Life Notification

PDN ID:	PDN01069
Notification Date:	2/06/18
Last Buy Date:	N/A
Last Shipment Date	N/A

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. We are unable to accept any further orders for these products **unless** we have available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.

http://www.centralsemi.com

Product End of Life Notification

PDN ID:	PDN01069
Notification Date:	2/06/18
Last Buy Date:	N/A
Last Shipment Date	N/A

Summary:The MPSA65 PNP Darlington transistor is discontinued and is now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

Central Part Number	**Replacement**	
MPSA65	MPSA64	H

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centralsemi.com.