

MPSA62 MPSA65
MPSA63 MPSA66
MPSA64

**SILICON
PNP DARLINGTON TRANSISTORS**



TO-92 CASE



www.centrasemi.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: ($T_A=25^\circ\text{C}$)

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL	MPSA63		MPSA65		UNITS
	MPSA62	MPSA64	MPSA64	MPSA66	
V_{CB0}	20	30	30	30	V
V_{CES}	20	30	30	30	V
V_{EBO}	10	10	8.0	8.0	V
I_C		500	500	500	mA
P_D		625	625	625	mW
T_J, T_{stg}		-65 to +150			$^\circ\text{C}$
Θ_{JA}		200	200	200	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

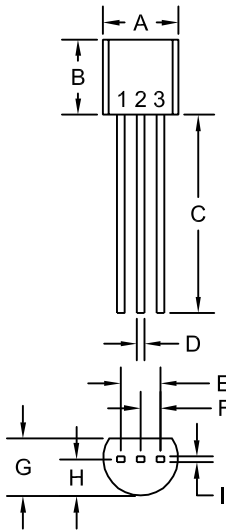
SYMBOL	TEST CONDITIONS	MPSA62		MPSA63		MPSA64		MPSA65		MPSA66		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB}=15\text{V}$	-	100	-	-	-	-	-	-	-	-	nA
I_{CBO}	$V_{CB}=30\text{V}$	-	-	-	100	-	100	-	100	-	100	nA
I_{EBO}	$V_{EB}=10\text{V}$	-	100	-	100	-	100	-	-	-	-	nA
I_{EBO}	$V_{EB}=8.0\text{V}$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

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

MARKING:

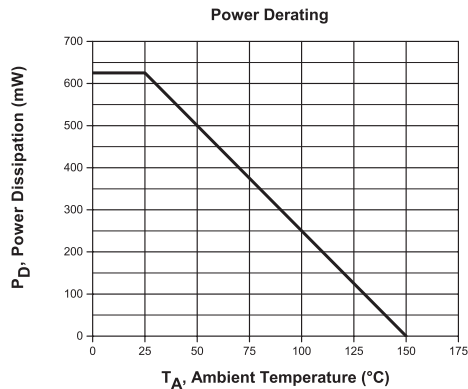
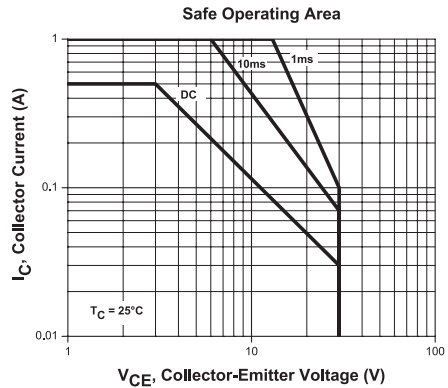
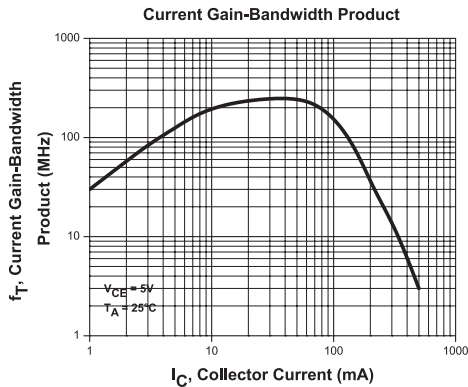
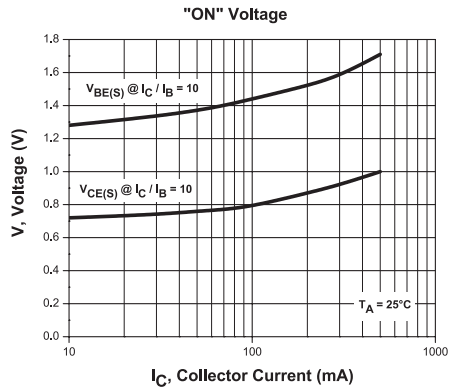
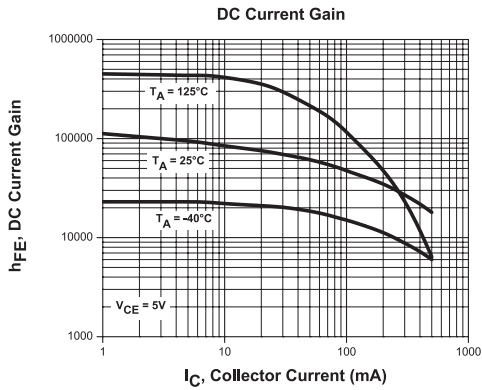
FULL PART NUMBER

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TYPICAL ELECTRICAL CHARACTERISTICS



R2 (30-November 2023)

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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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.

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