

Central™

Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

MPS3704
MPS3705
MPS3706

SILICON NPN TRANSISTOR

JEDEC TO-92 CASE (EBC)

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPS3704 thru MPS3706 are NPN silicon planar transistors for general purpose switching and amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	MPS3704	MPS3705	MPS3706	UNIT
Collector-Base Voltage	V _{CBO}	50	40	40	V
Collector-Emitter Voltage	V _{CEO}	30	20	20	V
Emitter-Base Voltage	V _{EBO}	5.0	5.0	5.0	V
Collector Current	I _C	600	600	600	mA
Power Dissipation	P _D	625	625	625	mW
Operating and Storage Junction Temperature	T _J , T _{STG}	-65	T _O +150	+150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL	TEST CONDITIONS	MPS3704		MPS3705		MPS3706		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{CBO}	V _{CB} =20V		100		100		100	nA
I _{EBO}	V _{EB} =3.0V		100		100		100	nA
BV _{CBO}	I _C =100μA	50		50		40		V
BV _{CEO}	I _C =10mA	30		30		20		V
BV _{EBO}	I _E =100μA	5.0		5.0		5.0		V
V _{CE(SAT)}	I _C =100mA, I _B =5.0mA		0.6		0.8		1.0	V
V _{BE(ON)}	V _{CE} =2.0V, I _C =100mA	0.5	1.0	0.5	1.0	0.5	1.0	V
h _{FE}	V _{CE} =2.0V, I _C =50mA	100	300	50	100	30	600	
f _T	V _{CE} =2.0V, I _C =50mA, f=20MHz	100		100		100		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		12		12		12	pF

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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