Data Sheet

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Manufacturers of World Class Discrete Semiconductors

MPSA62
MPSA63
MPSA64
MPSA65
MPSA66

PNP SILICON DARLINGTON TRANSISTORS

JEDEC TO-92 CASE (EBC)

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPSA62 series types are molded epoxy silicon PNP transistors manufactured by the epitaxial planar process designed for extremely high gain applications.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL	MPSA62	MPSA63	MPSA64	MPSA65	MPSA66	UNIT
Collector-Base Voltage	V_{CBO}	20	30	30	30	30	V
Collector-Emitter Voltage	V_{CES}	20	30	30	30	30	V
Emitter-Base Voltage	V_{EBO}	10	10	10	8.0	8.0	V
Collector Current	I_C			500			mA
Power Dissipation	P_D			625			mW
Power Dissipation (T_C=25°C)	P_D			1.5			W
Operating and Storage Junction Temperature	T_J, T_{STG}			-65 to +150			°C
Thermal Resistance	ΘJA			200			°C/W
Thermal Resistance	ΘJC			83.3			°C/W

ELECTRICAL CHARACTERISTICS

SYMBOL	TEST CONDITIONS	MPSA62 MIN	MPSA62 MAX	MPSA63 MIN	MPSA63 MAX	MPSA64 MIN	MPSA64 MAX	MPSA65 MIN	MPSA65 MAX	MPSA66 MIN	MPSA66 MAX	UNIT
I_{CBO}	V_{CB}=15V		100		-		-		-		-	nA
I_{CBO}	V_{CB}=30V		-		100		100		100		100	nA
I_{EBO}	V_{BE}=10V		100		100		100		-		-	nA
I_{EBO}	V_{BE}=8.0V		-		-		-		100		100	nA
BV_{CES}	I_C=100µA	20		30		30		30		30		V
$V_{CE(SAT)}$	I_C=10mA, I_B=.01mA		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_C=10mA		1.4		-		-		-		-	V
$V_{BE(ON)}$	V_{CE}=5.0V, I_C=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