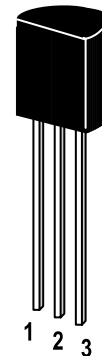


# MPSA63 / 64

## PNP Silicon Epitaxial Planar Transistor

Darlington Transistor

for high gain amplification



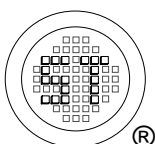
1. Emitter 2. Base 3. Collector  
TO-92 Plastic Package  
Weight approx. 0.19g

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	30	V
Collector Emitter Voltage	$-V_{CES}$	30	V
Emitter Base Voltage	$-V_{EBO}$	10	V
Collector Current	$-I_C$	500	mA
Total Power Dissipation	$P_{tot}$	625	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$

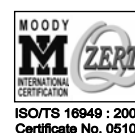
### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 5\text{ V}$ , $-I_C = 10\text{ mA}$  at $-V_{CE} = 5\text{ V}$ , $-I_C = 100\text{ mA}$	MPSA63 $h_{FE}$	5000	-	-
	MPSA64 $h_{FE}$	10000	-	-
	MPSA63 $h_{FE}$	10000	-	-
	MPSA64 $h_{FE}$	20000	-	-
Collector Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	100	nA
Emitter Cutoff Current at $-V_{EB} = 10\text{ V}$	$-I_{EBO}$	-	100	nA
Collector Emitter Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CES}$	30	-	V
Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$ , $-I_B = 100\text{ }\mu\text{A}$	$-V_{CE(sat)}$	-	1.5	V
Base Emitter On Voltage at $-V_{CE} = 5\text{ V}$ , $-I_C = 100\text{ mA}$	$V_{BE(on)}$	-	2	V
Transition Frequency at $-V_{CE} = 5\text{ V}$ , $I_E = 10\text{ mA}$	$f_T$	125	-	MHz

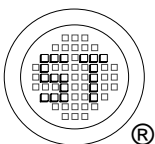
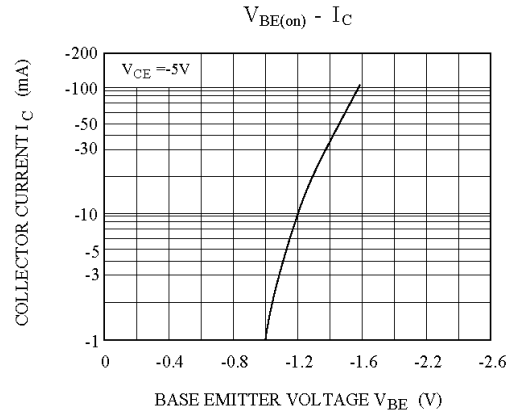
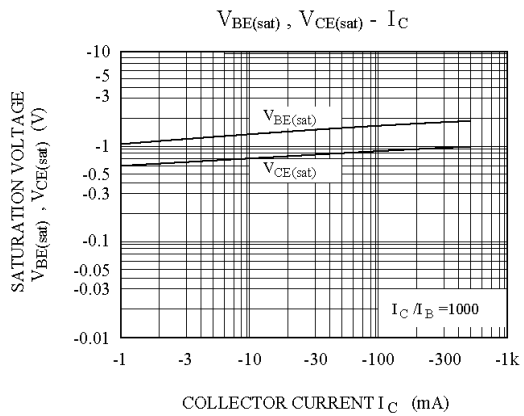
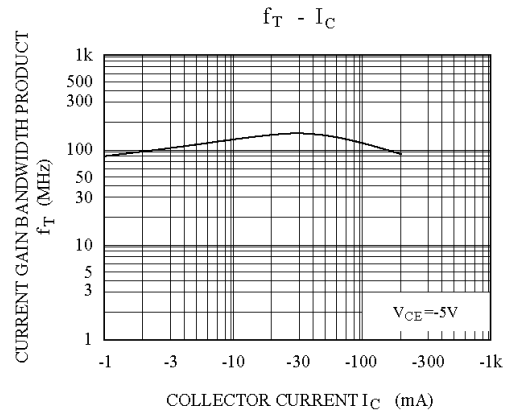
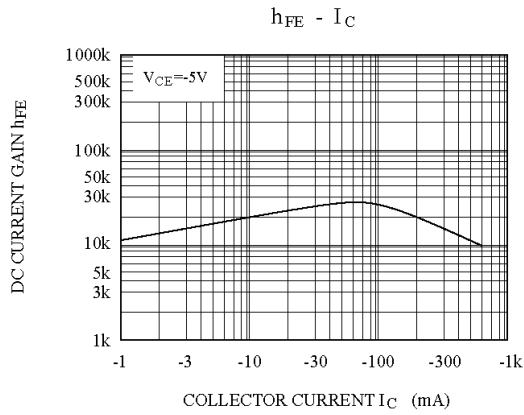


**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company  
listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 04/08/2007



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