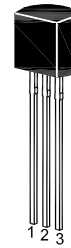


MPS750 / 751

PNP Silicon Epitaxial Planar Transistor

for switching and amplifier applications.



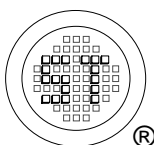
1. Emitter 2. Base 3. Collector
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	MPS750 MPS751 $-V_{CBO}$	60 80	V
Collector Emitter Voltage	MPS750 MPS751 $-V_{CEO}$	40 60	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	2	A
Power Dissipation	P_{tot}	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

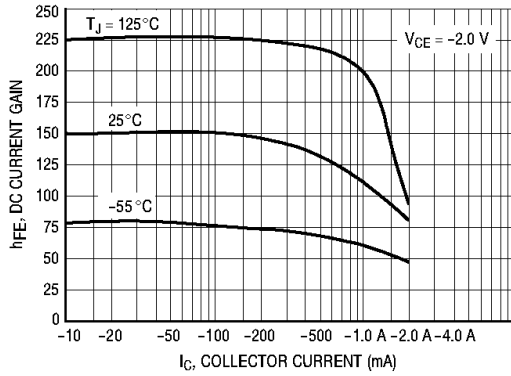
Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $-V_{CE} = 2\text{ V}$, $-I_C = 50\text{ mA}$	h_{FE}	75	-	-
at $-V_{CE} = 2\text{ V}$, $-I_C = 500\text{ mA}$	h_{FE}	75	-	-
at $-V_{CE} = 2\text{ V}$, $-I_C = 1\text{ A}$	h_{FE}	75	-	-
at $-V_{CE} = 2\text{ V}$, $-I_C = 2\text{ A}$	h_{FE}	40	-	-
Collector Base Cutoff Current				
at $-V_{CB} = 60\text{ V}$	MPS750 $-I_{CBO}$	-	100	nA
at $-V_{CB} = 80\text{ V}$	MPS751	-	100	nA
Emitter Base Cutoff Current				
at $-V_{EB} = 4\text{ V}$	$-I_{EBO}$	-	100	nA
Collector Base Breakdown Voltage				
at $-I_C = 100\text{ }\mu\text{A}$	MPS750 MPS751 $-V_{(BR)CBO}$	60 80	-	V
Collector Emitter Breakdown Voltage				
at $-I_C = 10\text{ mA}$	MPS750 MPS751 $-V_{(BR)CEO}$	40 60	-	V
Emitter Base Breakdown Voltage				
at $-I_E = 10\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage				
at $-I_C = 1\text{ A}$, $-I_B = 100\text{ mA}$	$-V_{CE(sat)}$	-	0.3	V
at $-I_C = 2\text{ A}$, $-I_B = 200\text{ mA}$		-	0.5	
Base Emitter Saturation Voltage				
at $-I_C = 1\text{ A}$, $-I_B = 100\text{ mA}$	$-V_{BE(sat)}$	-	1.2	V
Base Emitter On Voltage				
at $-I_C = 1\text{ A}$, $-V_{CE} = 2\text{ V}$	$-V_{BE(on)}$	-	1	V
Gain Bandwidth Product				
at $-V_{CE} = 5\text{ V}$, $-I_C = 50\text{ mA}$, $f = 100\text{ MHz}$	f_T	75	-	MHz



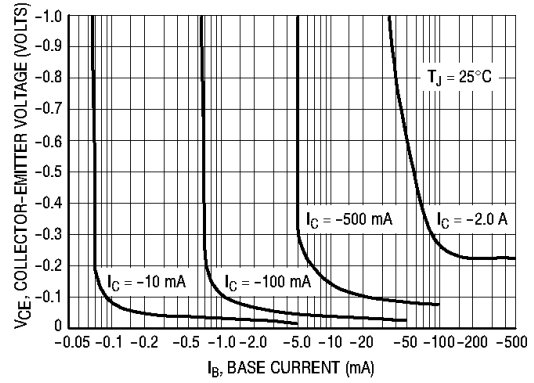
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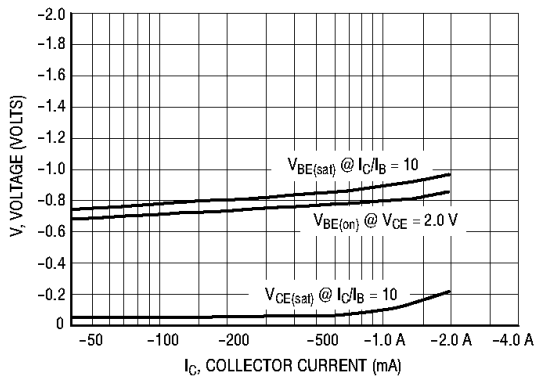
Dated : 05/01/2009



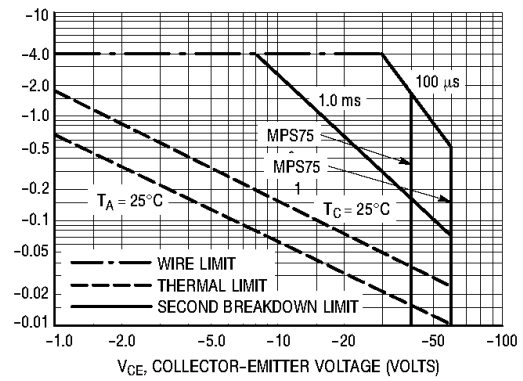
Typical DC Current Gain



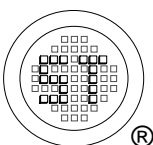
Collector Saturation Region



On Voltages



Safe Operating Area



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