



TO-92 Plastic-Encapsulate Transistors

MPSA05, 06

TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.625 W ($T_{amb}=25^{\circ}C$)

Collector current

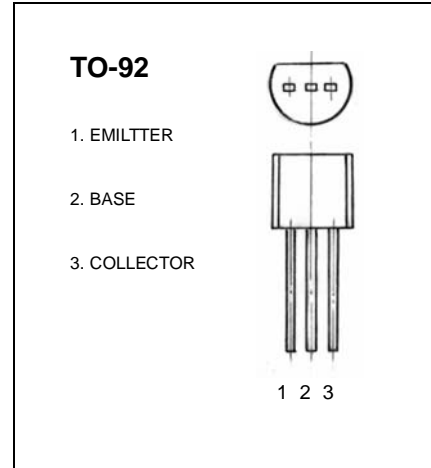
I_{CM} : 0.5 A

Collector-base voltage

$V_{(BR)CBO}$: MPSA05: 60 V
MPSA06: 80 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	MPSA05 MPSA06 $V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60 80		V
Collector-emitter breakdown voltage	MPSA05 MPSA06 $V_{(BR)CEO}$	$I_C=1mA, I_B=0$	60 80		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4		V
Collector cut-off current	MPSA05 MPSA06 I_{CBO}	$V_{CB}=60V, I_E=0$ $V_{CB}=80V, I_E=0$		0.1 0.1	μA
Collector cut-off current	MPSA05 MPSA06 I_{CEO}	$V_{CE}=50V, I_B=0$ $V_{CE}=60V, I_B=0$		0.1 0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$		0.1	μA
DC current gain	h_{FE}	$V_{CE}=1V, I_C=100mA$	100		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.25	V
Base-emitter on voltage	$V_{BE(on)}$	$I_C=100mA, V_{CE}=1V$		1.2	V
Transition frequency	f_T	$V_{CE}=2V, I_C=10mA$ $f=100MHz$	100		MHz