

TO-92 Plastic-Encapsulate Transistors

MPS2222 TRANSISTOR (NPN)

FEATURE

Power dissipation

$$P_{CM}: 0.625 \text{ W (Tamb=25°C)}$$

Collector current

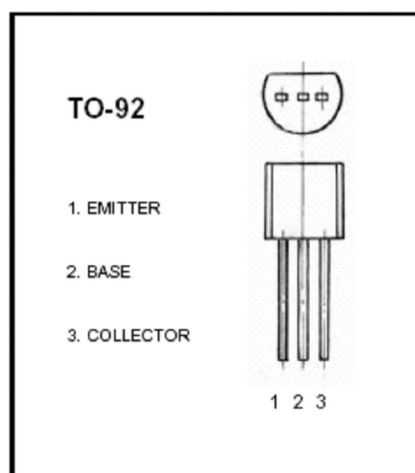
$$I_{CM}: 0.6 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 60 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55°C \text{ to } +150°C$$



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 50V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 3V, I_C = 0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 10V, I_C = 150mA$	100		300	
	$h_{FE(2)}$	$V_{CE} = 10V, I_C = 1mA$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$			1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500mA, I_B = 50mA$			2	V
Transition frequency	f_T	$V_{CE} = 20V, I_C = 20mA$ $f = 100MHz$	300			MHZ

CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H
Range	100-200	200-300