

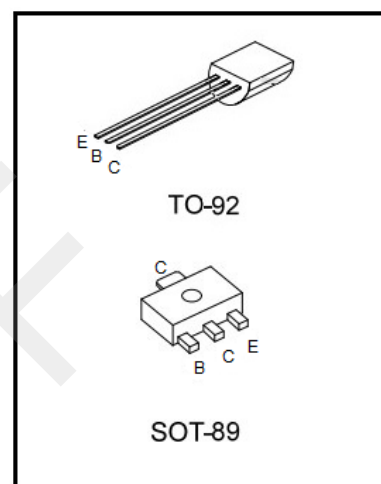
MPSA42

Package: TO-92/ SOP-89

Complement to MPSA92

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating		Unit
Collector-base voltage	BV_{CBO}	300		V
Collector-emitter voltage	BV_{CEO}	300		V
Emitter-base voltage	BV_{EBO}	6		V
Collector current	I_{CM}	500		mA
Collector Power Dissipation	P_C	TO-92	625	mW
		SOP-89	500	
Junction Temperature	T_j	150		°C
Storage Temperature	T_{stg}	-55~+150		°C



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu A, I_E=0$	300			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1mA, I_B=0$	300			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu A, I_C=0$	6			V
collector-base cut-off current	I_{CBO}	$V_{CB}=200V, I_E=0$			0.1	μA
collector-emitter cut-off current	I_{CEO}	$V_{CE}=200V, I_B=0$			0.1	μA
emitter-base cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			0.1	μA
DC current gain	H_{FE1}	$V_{CE}=10V, I_B=1mA$	25			
	H_{FE2}	$V_{CE}=10V, I_B=10mA$	40		240	
	H_{FE3}	$V_{CE}=10V, I_B=30mA$	40			
collector-emitter saturation voltage	$V_{CE(SAT)}$	$I_C=20mA, I_B=2mA$			0.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=20mA, I_B=2mA$			0.9	V
Transition frequency	f_T	$V_{CE}=20V, I_B=10mA, = 100 MHz$	50			MHz