恒光发
HENG GUANG FA

NPN Silicon Transistor

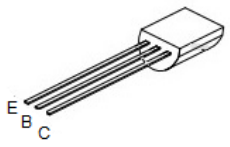
MPSA44

Package: TO-92/ SOP-89

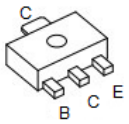
Complement to MPSA94

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating		Unit
Collector-base voltage	BV_{CBO}	500		V
Collector-emitter voltage	BV_{CEO}	400		V
Emitter-base voltage	BV_{EBO}	6		V
Collector current	I_{CM}	300		mA
Collector Power Dissipation	P_C	TO-92	625	mW
		SOP-89	500	
Junction Temperature	Tj	150		℃
Storage Temperature	Tstg	-55～+150		℃



TO-92



SOT-89

Electrical Characteristics（Ta=25℃）

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=100μA，I_E=0	500			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1mA，I_B=0	400			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=100μA，I_C=0	6			V
collector-base cut-off current	I_{CBO}	V_{CB}=400V，I_E=0			0.1	μA
collector-emitter cut-off current	I_{CEO}	V_{CE}=400V，I_B=0			0.5	μA
emitter-base cut-off current	I_{EBO}	V_{EB}=4V，I_C=0			0.1	μA
DC current gain	H_{FE1}	V_{CE}=10V，I_B=1mA	40			
	H_{FE2}	V_{CE}=10V，I_B=10mA	50		300	
	H_{FE3}	V_{CE}=10V，I_B=100mA	40			
collector-emitter saturation voltage	$V_{CE(SAT)}$	I_C=50mA，I_B=5mA			0.75	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	I_C=10mA，I_B=1mA			0.75	V
Transition frequency	f_T	V_{CE}=20V，I_B=10mA, = 100 MHz	50			MH_Z