

2SC1008

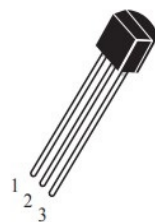
Package:TO-92

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating	Unit
Collector-base voltage	BV_{CBO}	80	V
Collector-emitter voltage	BV_{CEO}	60	V
Emitter-base voltage	BV_{EBO}	8	V
Collector current	I_{CM}	700	mA
Collector Power Dissipation	P_C	800	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

TO-92

1. EMITTER
2. BASE
3. COLLECTOR



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=10\mu A, I_E=0$	80			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=10mA, I_B=0$	60			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=10\mu A, I_C=0$	8			V
collector-base cut-off current	I_{CBO}	$V_{CB}=80V, I_E=0$			0.1	uA
collector-emitter cut-off current	I_{CEO}	$V_{CE}=60V, I_B=0$			10	uA
emitter-base cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	uA
DC current gain	H_{FE}	$V_{CE}=2V, I_B=50mA$	70		400	
		$V_{CE}=2V, I_B=5mA$	40			
		$V_{CE}=2V, I_B=500mA$	25			
collector-emitter saturation voltage	V_{CESAT}	$I_C=500mA, I_B=50mA$			0.4	V
Base-Emitter Saturation Voltage	V_{BESAT}	$I_C=500mA, I_B=50mA$			1.1	V
Transition frequency	f_T	$V_{CE}=10V, I_B=50mA, f=100MHz$	30			MHz

Classification of H_{FE}

Rank	2SC1008-O	2SC1008-Y	2SC1008-G
Range	70-140	120-240	200-400