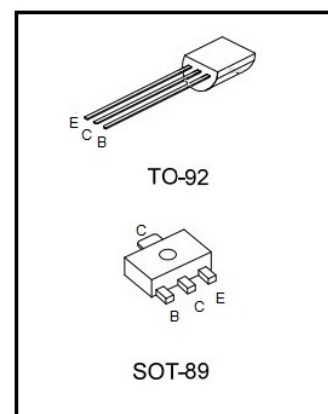


D965

- **Package: TO-92/SOT-89**

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating		Unit
Collector-base voltage	BV_{CBO}	40		V
Collector-emitter voltage	BV_{CEO}	20		V
Emitter-base voltage	BV_{EBO}	7		V
Collector current	I_{CM}	5		A
Collector Power Dissipation	P_C	TO-92	750	mW
		SOT-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}	$I_C=100\mu A, I_E=0$	40			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1mA, I_B=0$	20			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=10\mu A, I_C=0$	7			V
collector-base cut-off current	I_{CBO}	$V_{CB}=10V, I_E=0$			0.1	μA
emitter-base cut-off current	I_{EBO}	$V_{EB}=7V, I_C=0$			0.1	μA
DC current gain	H_{FE}	$V_{CE}=2V, I_B=500mA$	230		1000	
	H_{FE1}	$V_{CE}=2V, I_B=1mA$		200		
	H_{FE2}	$V_{CE}=2V, I_B=2A$	150			
collector-emitter saturation voltage	V_{CESAT}	$I_C=3A, I_B=100mA$			0.5	V
Transition frequency	f_T	$V_{CE}=6V, I_B=50mA$		150		MHz

Classification of H_{FE}

Rank	Q	R	S	T
Range	230-380	340-600	560-800	800-1000