

FEATURES

Power dissipation

P_{CM} : 1.5 W ($T_{amb}=25^{\circ}C$)

Collector current

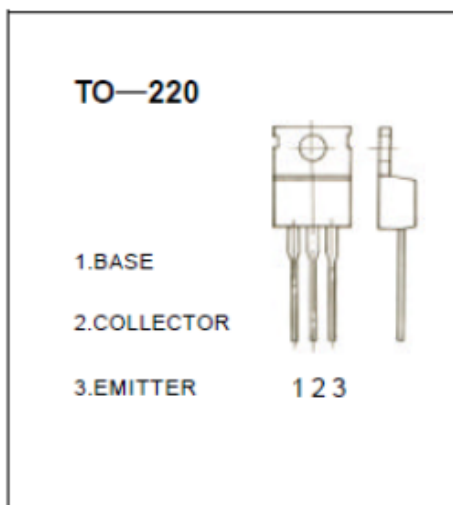
I_{CM} : 4 A

Collector-base voltage

$V_{(BR)CBO}$: 700 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$



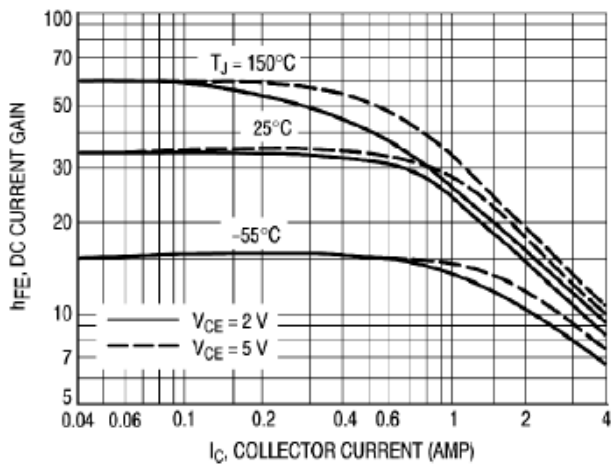
ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1000 \mu A, I_E=0$	700			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10 mA, I_B=0$	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1000 \mu A, I_C=0$	9			V
Collector cut-off current	I_{CBO}	$V_{CB}=700 V, I_E=0$			1000	μA
Collector cut-off current	I_{CEO}	$V_{CE}=400 V, I_B=0$			100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=9 V, I_C=0$			1000	μA
DC current gain	h_{FE}	$V_{CE}=5 V, I_C=1000mA$	10		40	
Collector-emitter saturation voltage	$V_{CE}(sat)$	$I_C=2000mA, I_B=500 mA$			0.6	V
Base-emitter saturation voltage	$V_{BE}(sat)$	$I_C=2000mA, I_E=500mA$			1.6	V
Transition Frequency	f_T	$V_{CE}=10 V, I_C=500mA$ $f=1MHz$	5			MHz
Fall time	t_f	$I_{B1}=-I_{B2}=0.4A, I_C=2A$ $V_{CC}=120V$			0.9	μs
Storage time	t_s				4	μs

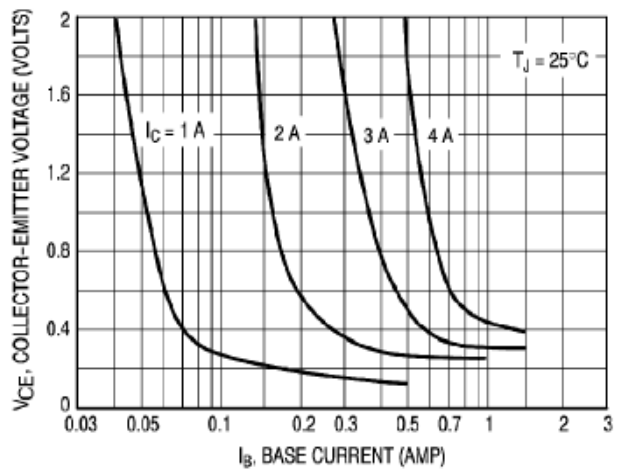
CLASSIFICATION OF h_{FE}

Rank						
Range	10-15	15-20	20-25	25-30	30-35	35-40

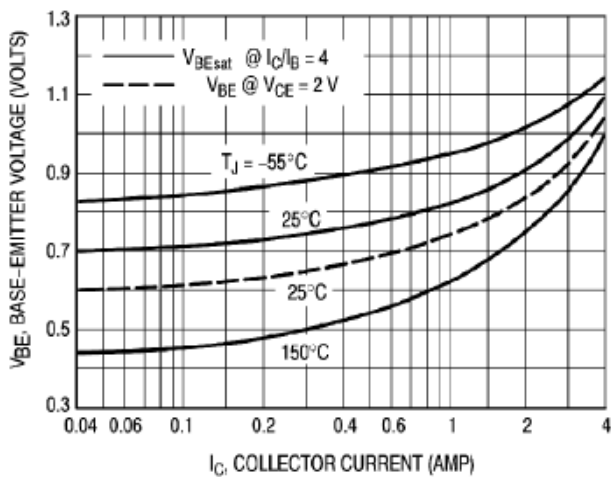
Typical Characteristics



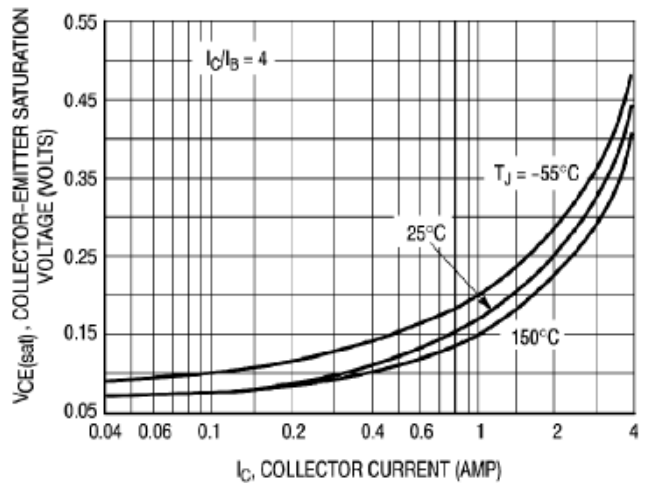
DC Current Gain



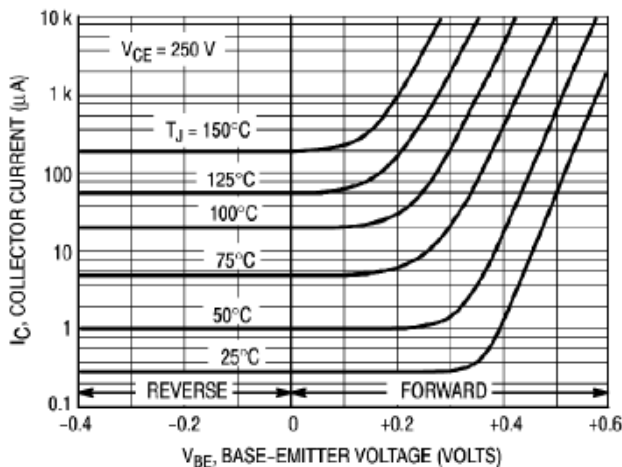
Collector Saturation Region



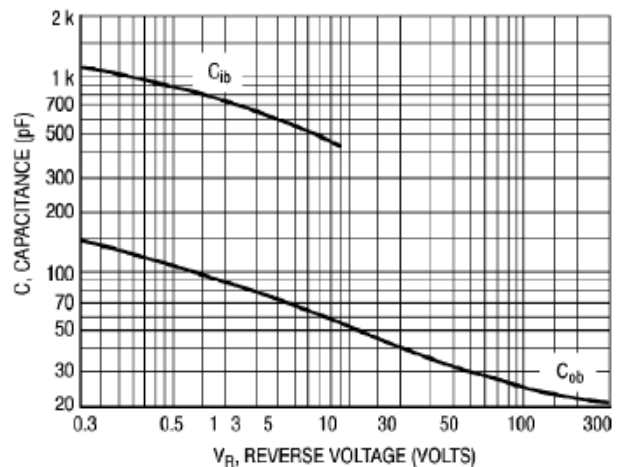
Base-Emitter Voltage



Collector-Emitter Saturation Voltage



Collector Cutoff Region



Capacitance