

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Collector-emitter breakdown voltage	BV_{CEO}	-60	-	-	V	$I_C = -1mA$
Collector-base breakdown voltage	BV_{CBO}	-60	-	-	V	$I_C = -100\mu A$
Emitter-base breakdown voltage	BV_{EBO}	-6	-	-	V	$I_E = -100\mu A$
Collector cut-off current	I_{CBO}	-	-	-1.0	μA	$V_{CB} = -40V$
Emitter cut-off current	I_{EBO}	-	-	-1.0	μA	$V_{EB} = -4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-200	-500	mV	$I_C = -1.0A$ $I_B = -100mA$
DC current gain	h_{FE}	120	-	390	-	$V_{CE} = -2V$ $I_C = -100mA$
Transition frequency	f_T	-	310	-	MHz	$V_{CE} = -10V$ $I_E = 100mA$ $f = 10MHz$
Corrector output capacitance	C_{ob}	-	25	-	pF	$V_{CB} = -10V$ $I_E = 0mA$ $f = 1MHz$
Turn-on time	T_{on}	-	25	-	ns	$I_C = -2.0A$ $I_{B1} = -200mA$ $I_{B2} = 200mA$ $V_{CC} \approx -25V$
Storage time	T_{stg}	-	120	-	ns	
Fall time	T_f	-	30	-	ns	

*Single non repetitive pulse

●hFE RANK

Q	R
120-270	180-390

●Electrical characteristic curves

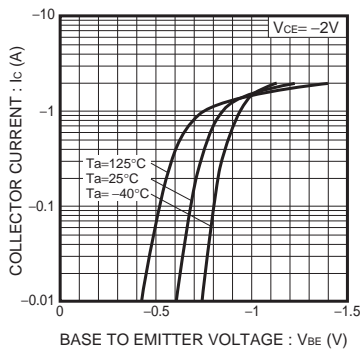


Fig.1 Grounded Emitter Propagation Characteristics

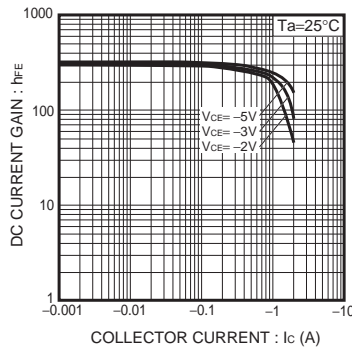


Fig.2 DC Current Gain vs. Collector Current (I)

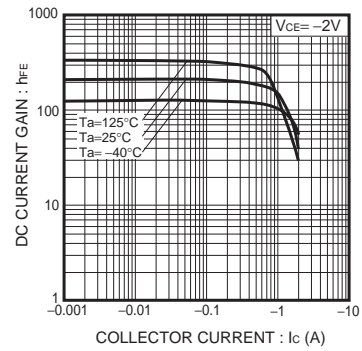


Fig.3 DC Current Gain vs. Collector Current (II)

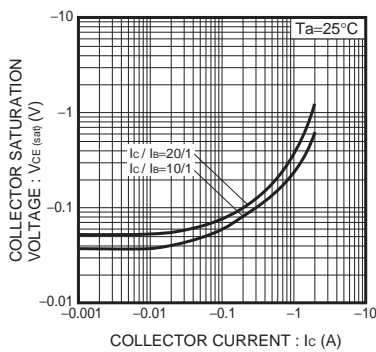


Fig.4 Collector-Emitter Saturation Voltage vs. Collector Current (I)

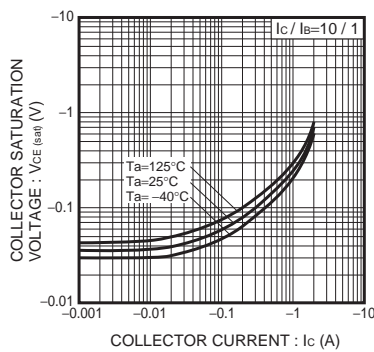


Fig.5 Collector-Emitter Saturation Voltage vs. Collector Current (II)

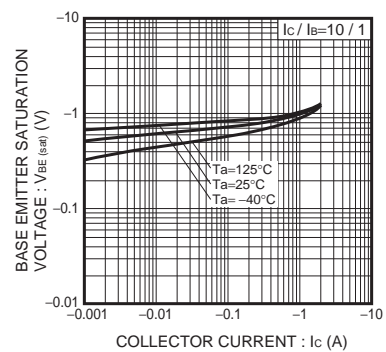


Fig.6 Base-Emitter Saturation Voltage vs. Collector Current

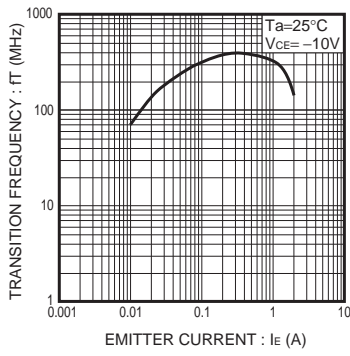


Fig.7 Transition Frequency

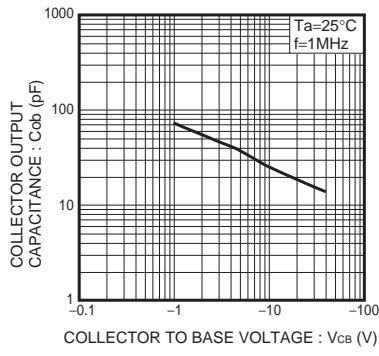


Fig.8 Collector Output Capacitance

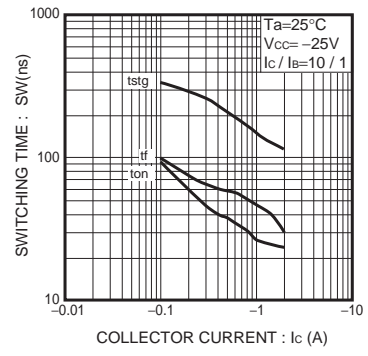
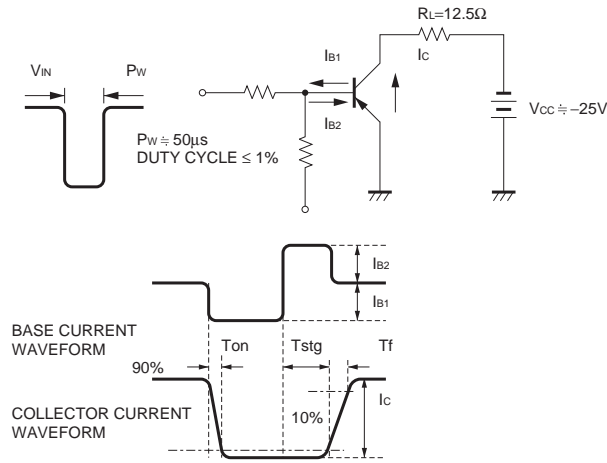


Fig.9 Switching Time

●Switching characteristics measurement circuits



Notes

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