

2SD2707/2SD2654/2SD2351/2SD2226K/2SD2227S

Transistors

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	60	–	–	V	$I_C=10\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	50	–	–	V	$I_C=1mA$
Emitter-base breakdown voltage	BV_{EBO}	12	–	–	V	$I_E=10\mu A$
Collector cutoff current	I_{CBO}	–	–	0.3	μA	$V_{CB}=50V$
Emitter cutoff current	I_{EBO}	–	–	0.3	μA	$V_{EB}=12V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	–	–	0.3	V	$I_C/I_B=50mA/5mA$
DC current transfer ratio	h_{FE}	820	–	2700	–	$V_{CE}/I_C=5V/1mA$
Transition frequency	f_T	–	250	–	MHz	$V_{CE}=5V, I_E=-10mA, f=100MHz$
Output capacitance	C_{ob}	–	3.5	–	pF	$V_{CB}=5V, I_E=0A, f=1MHz$

* Measured using pulse current.

●Electrical characteristics curves

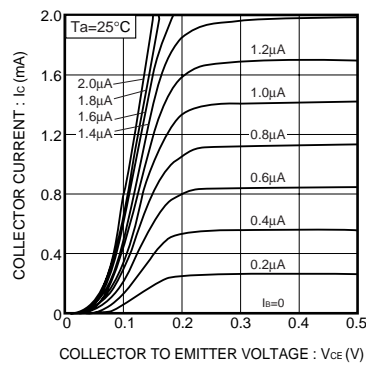


Fig.1 Grounded emitter output characteristics (I)

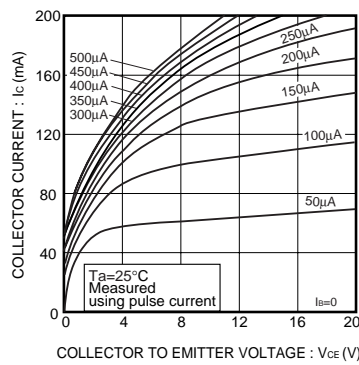


Fig.2 Grounded emitter output characteristics (II)

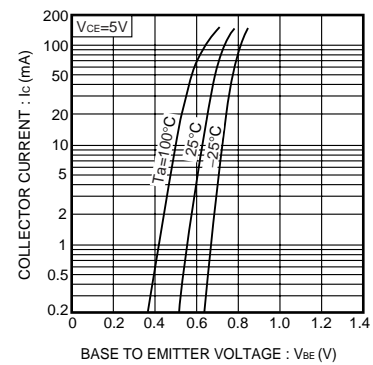


Fig.3 Grounded emitter propagation characteristics

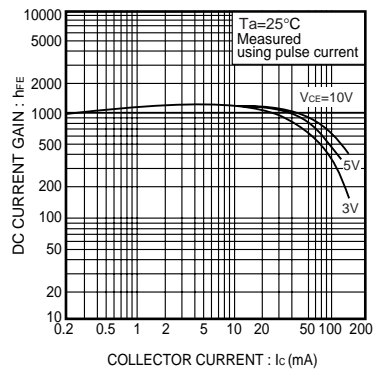


Fig.4 DC current gain vs. collector current (I)

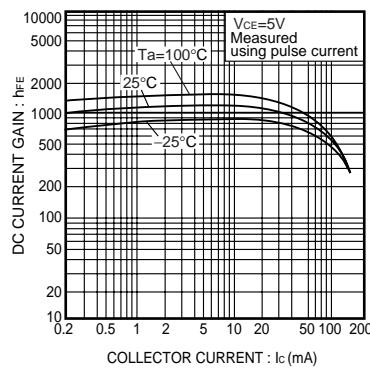


Fig.5 DC current gain vs. collector current (II)

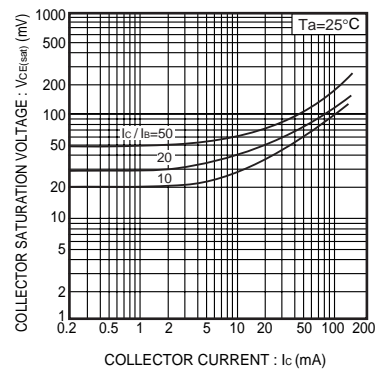


Fig.6 Collector-emitter saturation voltage vs. collector current (I)

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Transistors

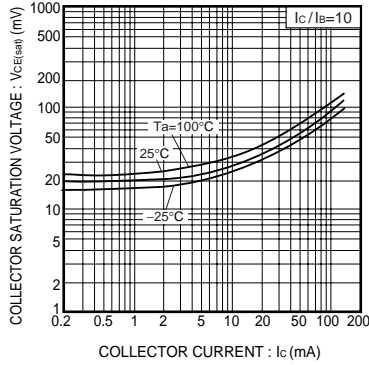


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

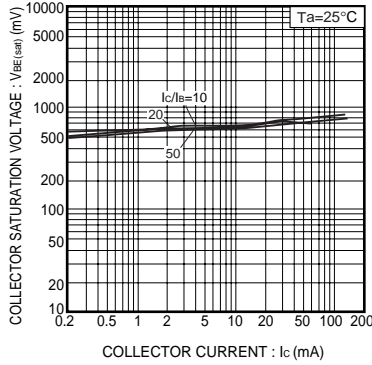


Fig.8 Base-emitter saturation voltage vs. collector current (I)

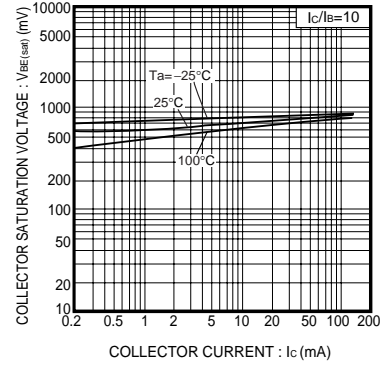


Fig.9 Base-emitter saturation voltage vs. collector current (II)

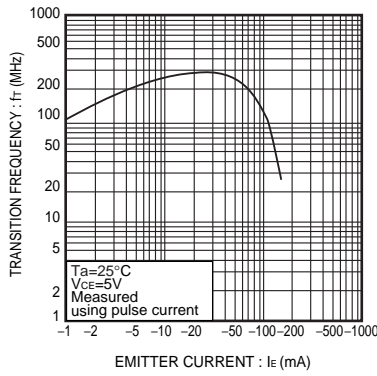


Fig.10 Gain bandwidth product vs. emitter current

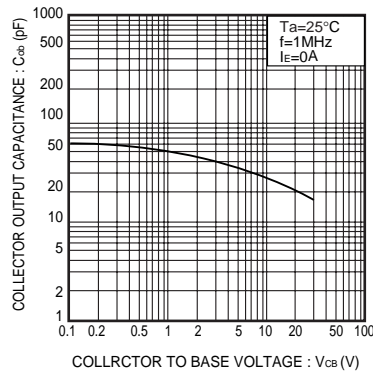


Fig.11 Collector output capacitance vs. collector-base voltage

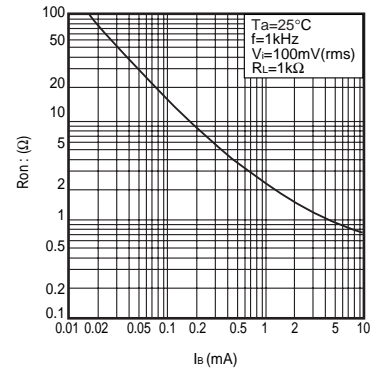


Fig.12 Output on resistance vs. base current

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