Power Transistor (80V, 0.3A)

2SC3359S

●**Features**

1) High breakdown voltage, BV_{CEO}=80V

2) Low saturation voltage, typically $V_{CE(sat)}$ =0.2V at I_B=0.3A / 0.03A

●**Electrical characteristics** (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	80	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	0.3	A
Collector power dissipation	P_C	0.3	W
Junction temperature	Tj	150	℃
Storage temperature	Tstg	−55 to +150	℃

●**Absolute maximum ratings** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV_{CEO}	80	–	–	V	I_C=1mA
Collector-base breakdown voltage	BV_{CBO}	80	–	–	V	I_C=50μA
Emitter-base breakdown voltage	BV_{EBO}	5	–	–	V	I_E=50μA
Collector outoff current	I_{CBO}	–	–	0.5	μA	V_{CB}=80V
Emitter outoff current	I_{EBO}	–	–	0.5	μA	V_{EB}=4V
Collector-emitter saturation voltage	$V_{CE(sat)}$	–	0.2	0.5	V	V_C/I_{CB}=0.3V/0.03A
DC current transfer ratio	h_{FE}	120	–	390	–	V_{CE}=3V, I_C=0.1A
Transition frequency	f_T	50	150	–	MHz	V_{CE}=5V , I_E=−0.01A , f=100MHz
Output capacitance	Cob	–	5	8	pF	V_{CB}=10V , I_E=0A , f=1MHz

●**Packaging specification and h_{FE}**

Type	2SC3359S
Package	SPT
h_{FE}	QR
Code	TP
Basic orderin unit (pieces)	5000

●Electrical characteristic curves

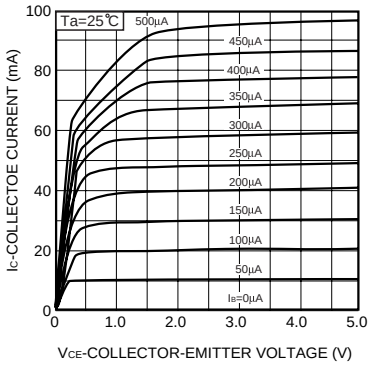

Fig.1 Typical output characteristics

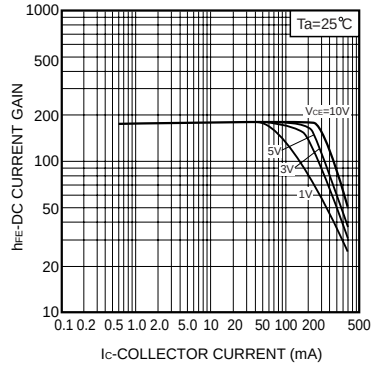

Fig.2 DC current gain vs. collector current

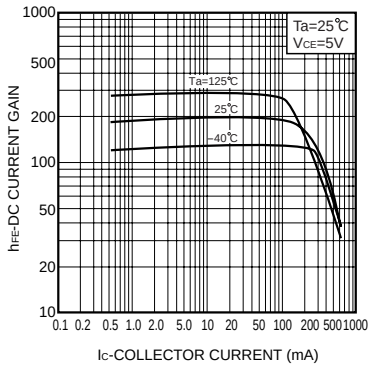

Fig.3 DC current gain vs. collector current

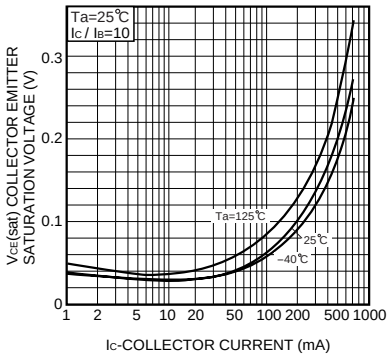

Fig.4 Collector emitter saturation voltage vs. collector current

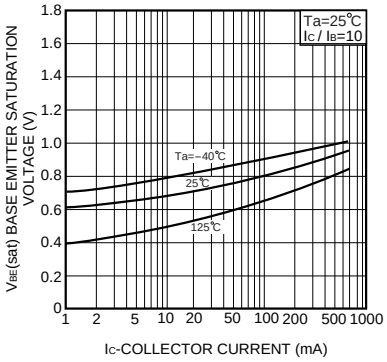

Fig.5 Base emitter saturation voltage vs. collector current

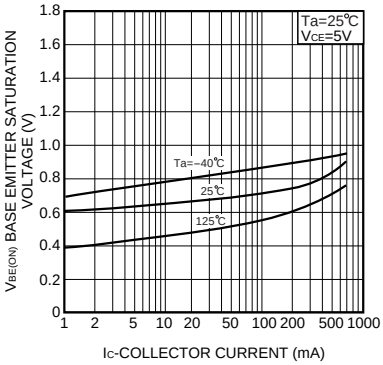

Fig.6 Base emitter 'ON' voltage vs. collector ccurrent

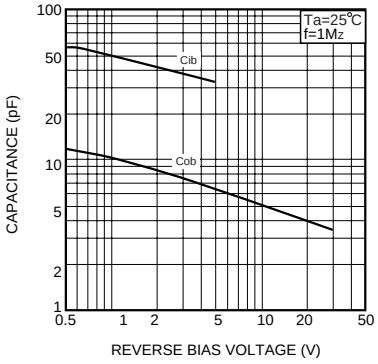

Fig.7 Capacitance vs. reverse bias voltage

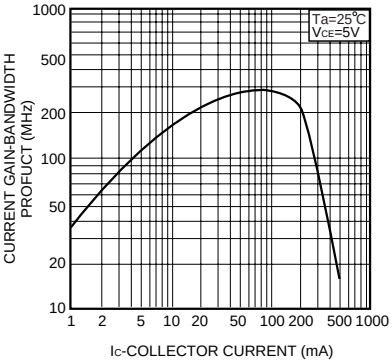

Fig.8 Current gain-bandwidth product vs. collector current

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