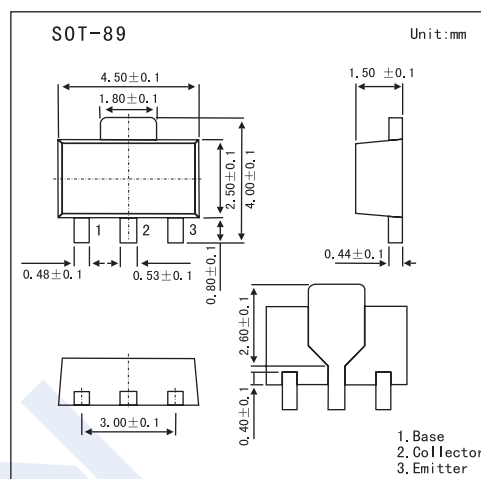


High Current Drive Applications

2SA1363

■ Features

- High h_{FE} : $h_{FE} = 150$ to 800
- High Collector Current ($I_C = -2A$)
- High Collector Dissipation $P_C = 500mW$
- Small Package For Mounting
- Complementary to 2SC3443

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-20	V
Collector-Emitter Voltage	V_{CEO}	-16	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-2	A
Peak Collector Current	I_{CM}	-3	A
Collector Power Dissipation	P_C	500	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature Range	T_{stg}	-55 to +150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB} = -16V, I_E = 0$			-0.2	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-0.2	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -2mA, R_{BE} = \infty$	-16			V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-20			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-6			V
DC Current Gain	h_{FE}	$V_{CE} = -4V, I_C = 100mA$	150		800	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1A, I_B = -50mA$		-0.17	-0.3	V
Transition Frequency	f_T	$V_{CE} = -2V, I_E = 10mA$		80		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		42		pF

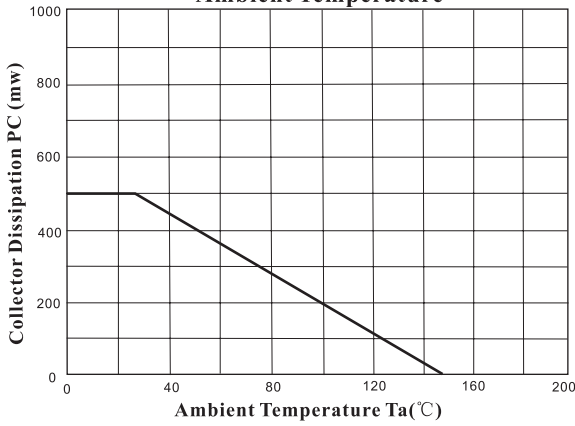
■ h_{FE} Classification

Marking	A		
	E	F	G
h_{FE}	150 ~ 300	250 ~ 500	400 ~ 800

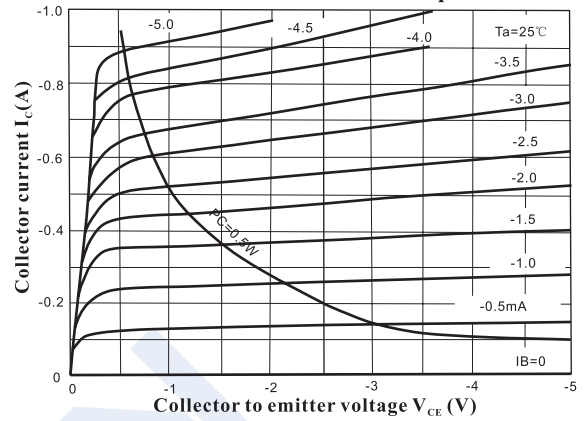
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Electrical Characteristics Curves

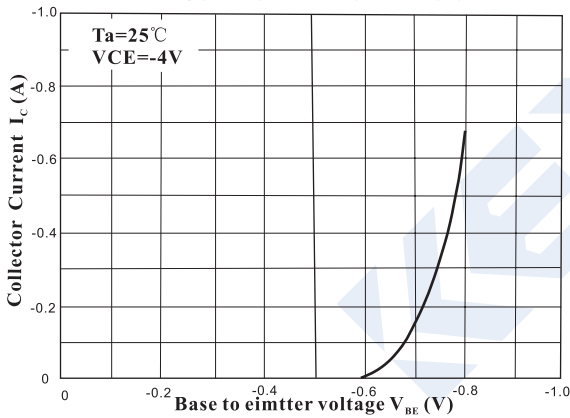
Collector Dissipation vs Ambient Temperature



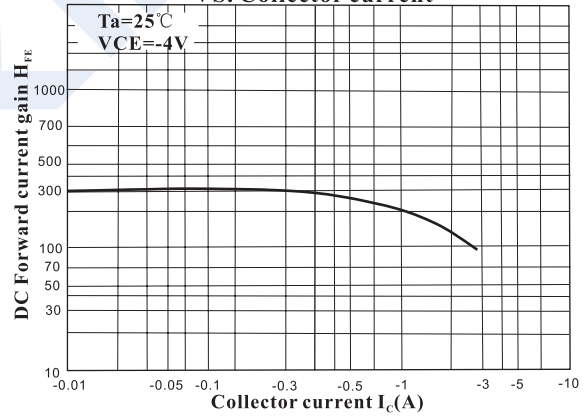
Common emitter output



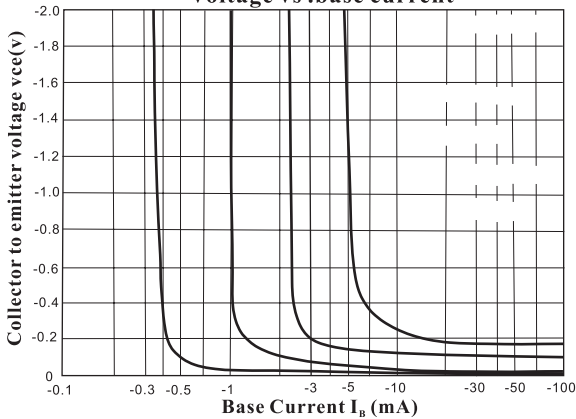
Common Emitter Transfer



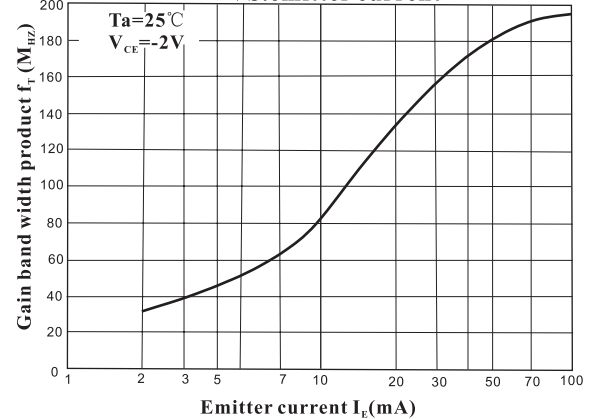
DC Forward current gain VS. Collector current



Collector to emitter saturation Voltage vs. base current



Gain band width product VS. emitter current



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