

Transistors

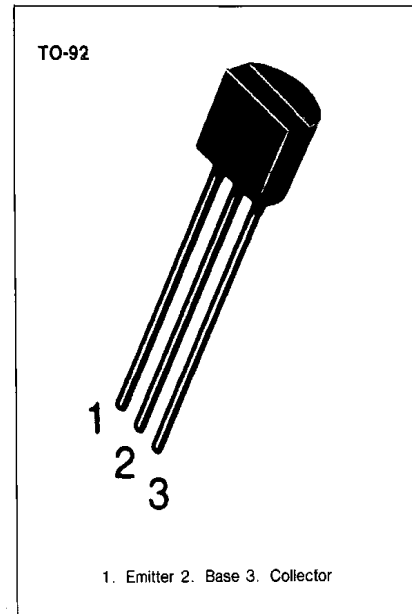
2SA1625

HIGH VOLTAGE SWITCH

- High Breakdown Voltage
- High Speed Switching

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristics	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	-400	V
Collector Emitter Voltage	V_{CEO}	-400	V
Emitter Base Voltage	V_{EBO}	-7	V
Base Current	I_B	-0.25	A
Collector Current (DC)	I_C	-0.5	A
Collector Current (Pulse)	I_C	-1.0	A
Collector Dissipation (Ta=25°C)	P_C	0.75	W
Collector Dissipation (Tc=25°C)	P_C	2	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C)

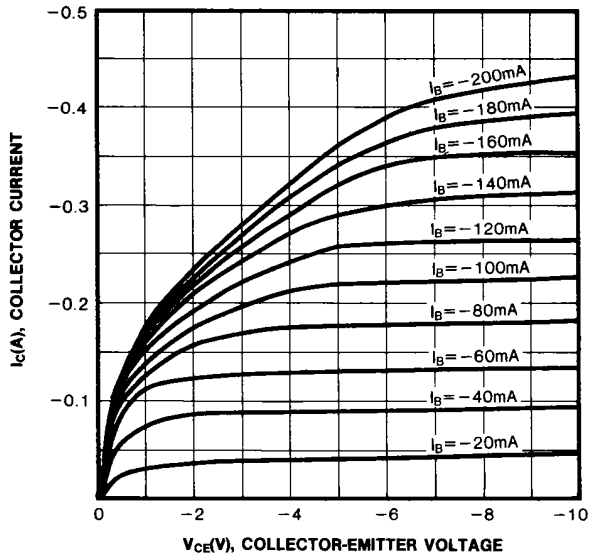
Characteristics	Symbol	Test Conditions	Min	Max	Unit
Collector Emitter Breakdown Voltage	BV_{CEO}	$I_C = -1mA, I_B = 0$	-400		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -400V, I_E = 0$		-1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$		-1	μA
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = -50mA$	40	200	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$		-1	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -100mA, I_B = -10mA$		-1.2	V
Current Gain Bandwidth Product	f_T	$V_{CE} = -10V, I_E = -10mA$	10		MHz
Output Capacitance	C_{OB}	$V_{CB} = -10V, f = 1MHz$		25	pF
Turn On Time	t_{ON}	$I_C = -100mA, R_L = 1.5k\Omega$		1	us
Storage Time	t_{STG}	$I_{B1} = -10mA, I_{B2} = -10mA$		5	us
Fall Time	t_F	$V_{CC} = -150V$		1	us

hFE CLASSIFICATION

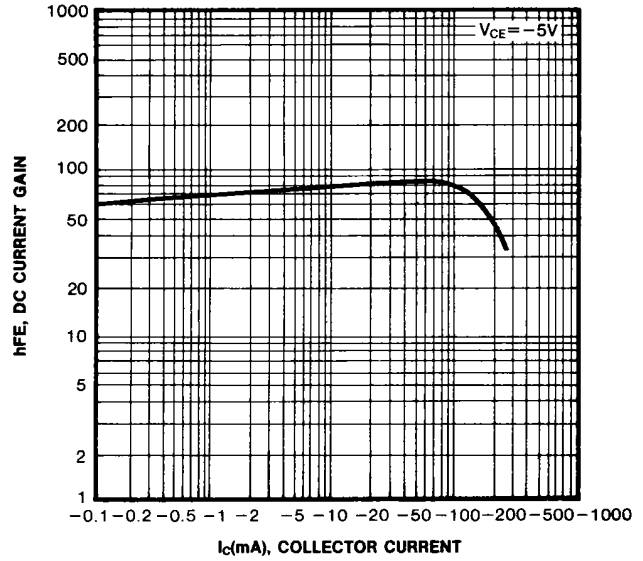
Classification	M	L	K
hFE	40-80	60-120	100-200



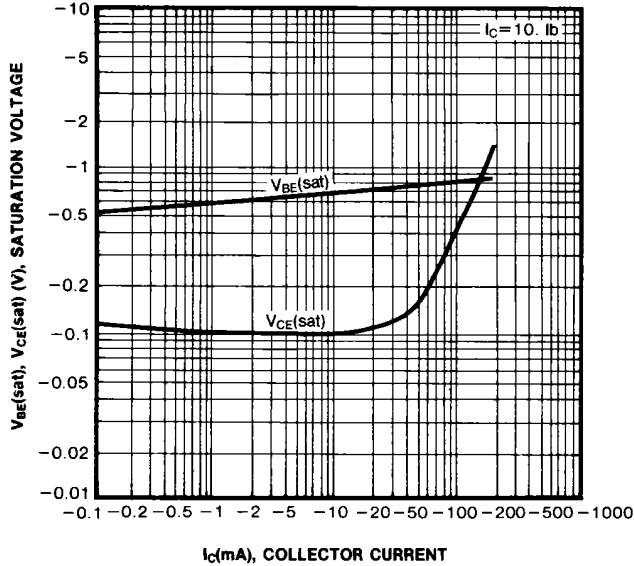
STATIC CHARACTERISTIC



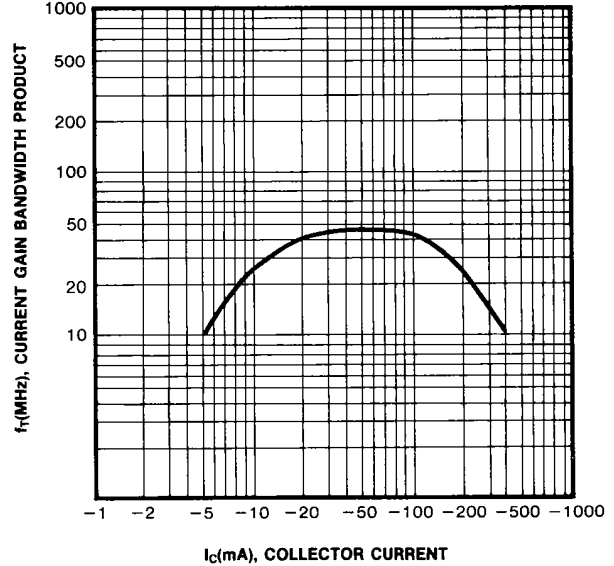
DC CURRENT GAIN



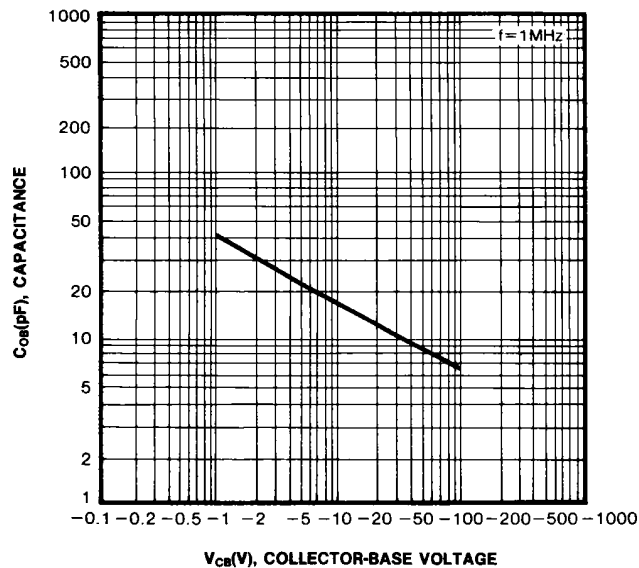
COLLECTOR-EMITTER SATURATION VOLTAGE
BASE-EMITTER SATURATION VOLTAGE



CURRENT GAIN BANDWIDTH PRODUCT



COLLECTOR OUTPUT CAPACITANCE



POWER DERATING

