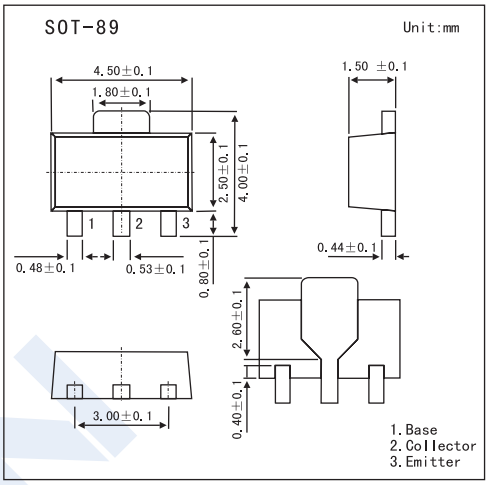
High Voltage Switching Applications

2SC2880



■ Features

- High Voltage : V_{CEO} = 150V
- High Transition Frequency : f_T = 120MHz(typ.)
- Small Flat Package
- Complementary to 2SA1200

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	150	V
Collector-Base Voltage	V_{CBO}	200	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	50	mA
Base Current	I_B	10	mA
Collector Power Dissipation	P_C	500	mW
	P_C *	800	
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* Mounted on a ceramic substrate (250 mm^2 x 0.8 t)

■ Electrical Characteristics Ta = 25℃

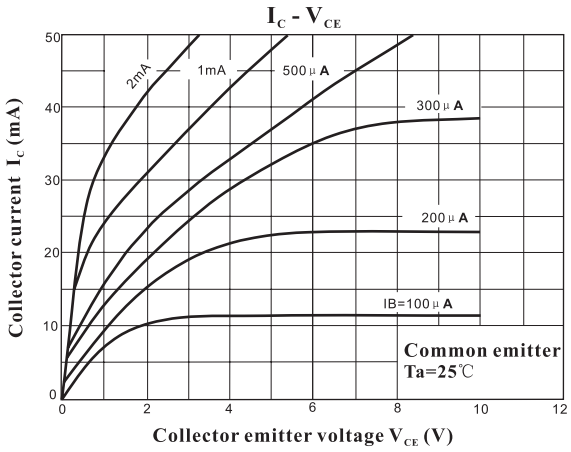
Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Emitter Cut-off Current	I_{EBO}	V_{EB} = 5V , I_C = 0			0.1	μA
Collector Cut-off Current	I_{CBO}	V_{CB} = 200V , I_E = 0			0.1	μA
DC Current Gain	h_{FE}	V_{CE} = 5V , I_C = 10mA	70		240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 10mA , I_B = 1mA			0.5	V
Base-Emitter Voltage	V_{BE}	V_{CE} = 5V , I_C = 30mA			1	V
Transtion Frequency	f_T	V_{CE} = 30V , I_C = 10mA		120		MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 10V , I_E = 0 , f = 1MHz		3.5	5.0	pF

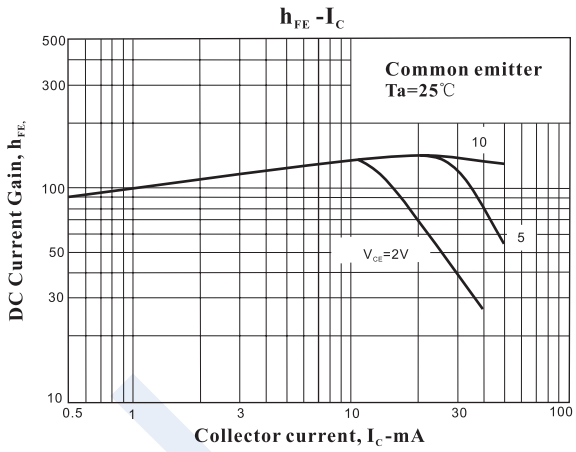
■ h_{FE} Classification

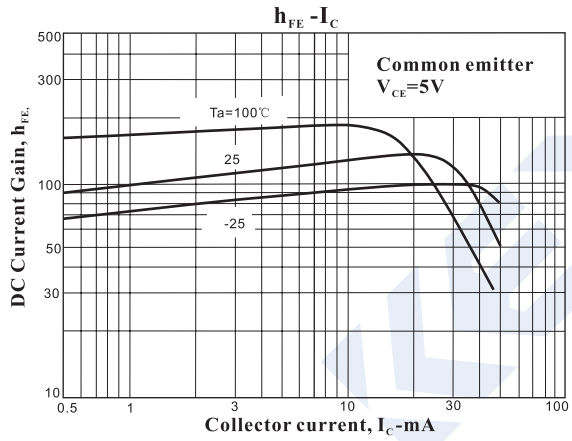
Marking	A	
Rank	O	Y
hFE	70～140	120～240

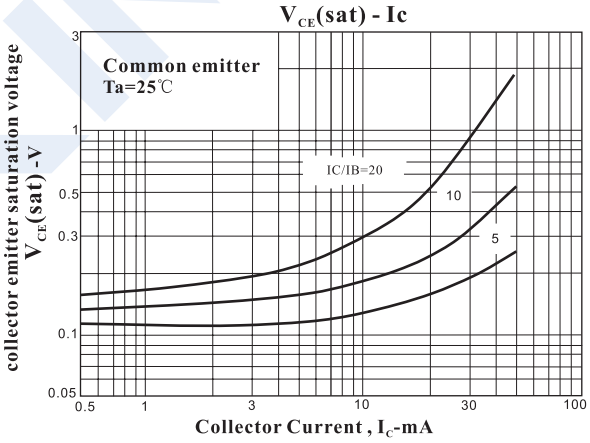
2SC2880

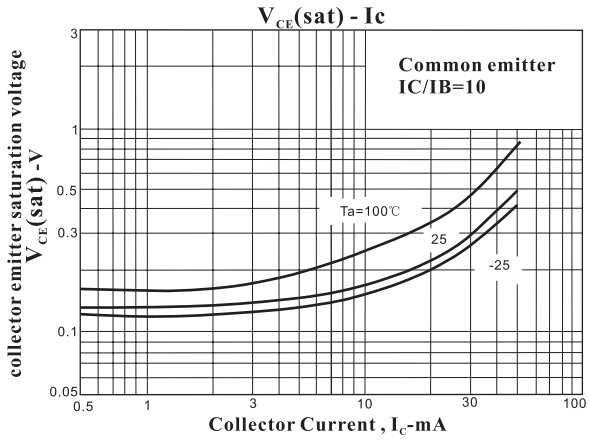
■ Electrical Characteristics Curves

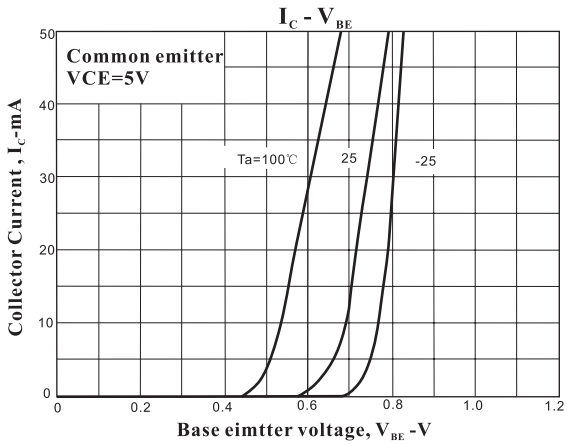




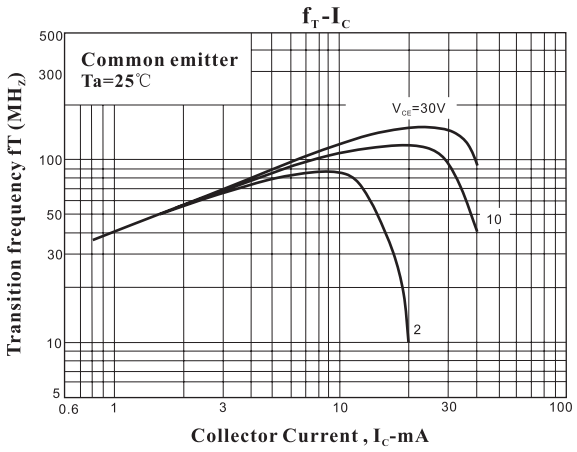


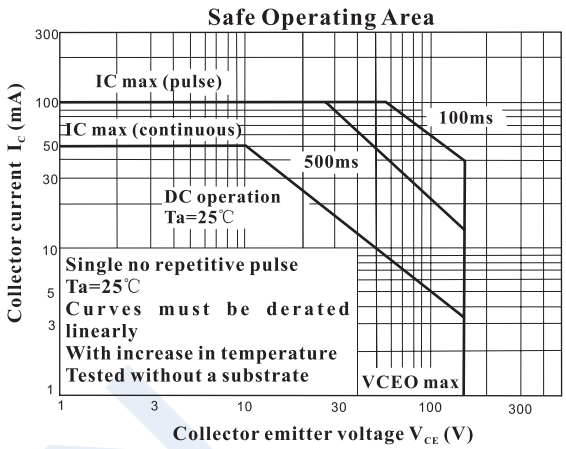


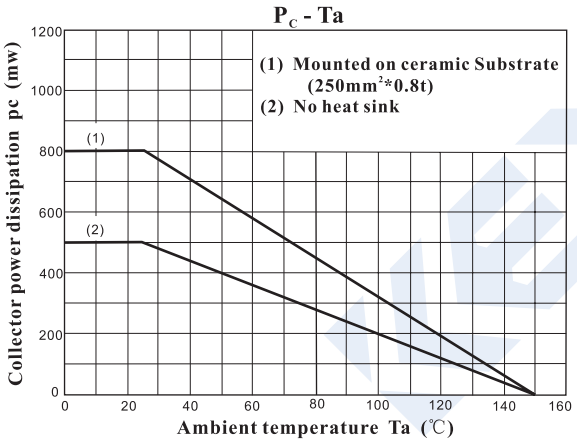




2SC2880


f_T-I_C
Common emitter
Ta=25℃
V_{CE}=30V
10
2
Transition frequency fT (MHz)
Collector Current , I_C-mA


Safe Operating Area
IC max (pulse)
IC max (continuous)
100ms
500ms
DC operation
Ta=25℃
Single no repetitive pulse
Ta=25℃
Curves must be derated linearly
With increase in temperature
Tested without a substrate
VCEO max
Collector current I_C (mA)
Collector emitter voltage V_{CE} (V)


P_C - Ta
(1) Mounted on ceramic Substrate
(250mm²*0.8t)
(2) No heat sink
(1)
(2)
Collector power dissipation pc (mw)
Ambient temperature Ta (℃)