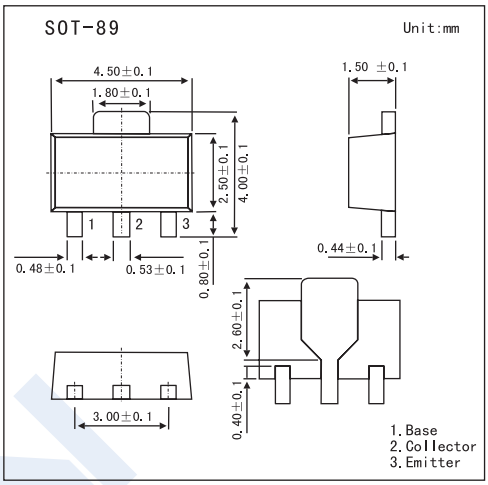
High Voltage Control Applications

2SC3515



■ Features

- High Voltage: V_{CBO} = 300V , V_{CEO} = 300V
- Low Saturation Voltage: $V_{CE(sat)}$ = 0.5V (max)
- Small Collector Output Capacitance: C_{ob} = 3pF(typ.)
- P_C = 1 to 2W (mounted on ceramic substrate)
- Small Flat Package
- Complementary to 2SA1384

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	100	mA
Base Current	I_B	20	mA
Collector Power Dissipation	P_C	500	mW
	P_C *	1000	
Jumction temperature	T_j	150	℃
Storage temperature Range	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
Collector Cut-off Current	I_{CBO}	V_{CB} = 300V , I_E = 0			0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 6V , I_C = 0			0.1	μA
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 0.1mA , I_E = 0	300			V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 1mA , I_B = 0	300			V
DC Current Gain	h_{FE}	V_{CE} = 10V , I_C = 20mA	30		150	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 20mA , I_B = 2mA			0.5	V
Base-emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 20mA , I_B = 2mA			1	V
Transition Frequency	f_T	V_{CE} = 10V , I_C = 20mA	50	80		MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 20V , I_E = 0 , f = 1MHz		3	4	pF

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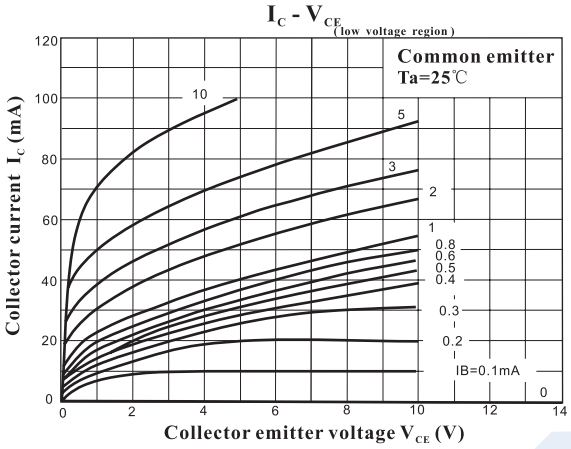
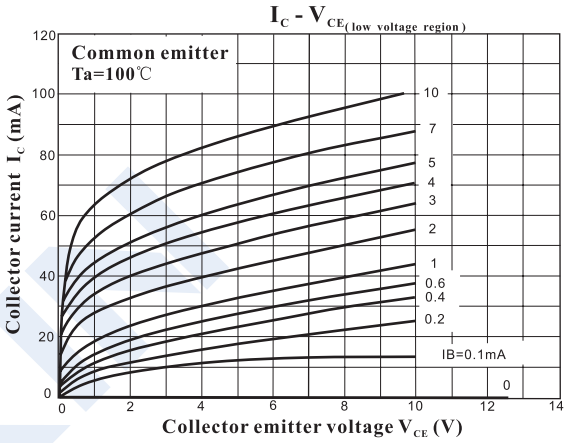
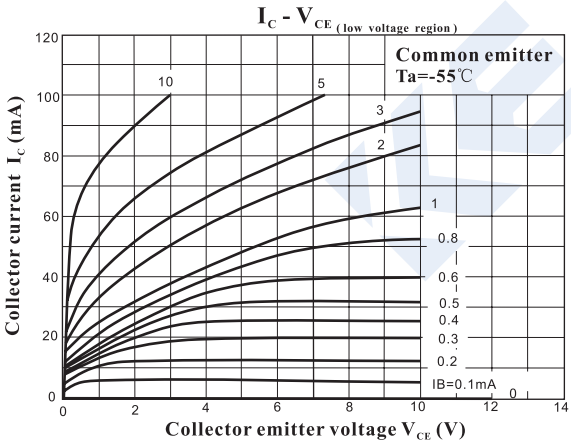
■ hFE Classification

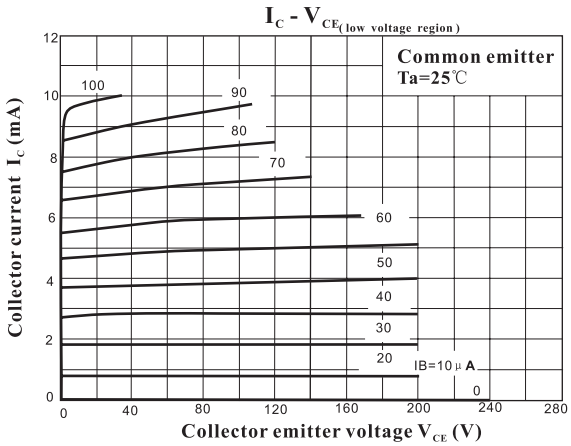
Marking	I	
Rank	R	O
hFE	30 ～ 90	50 ～ 150

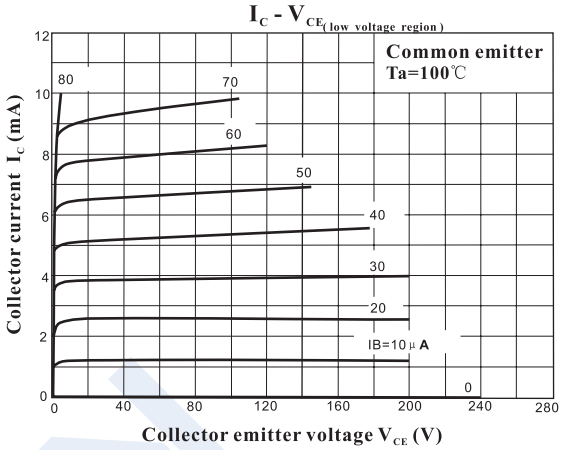
■ Electrical Characteristics Curves

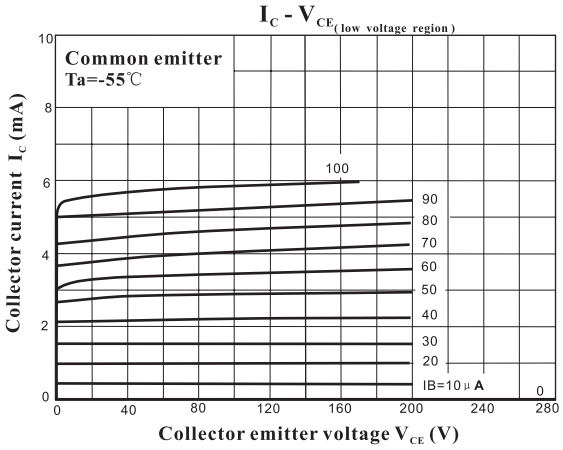












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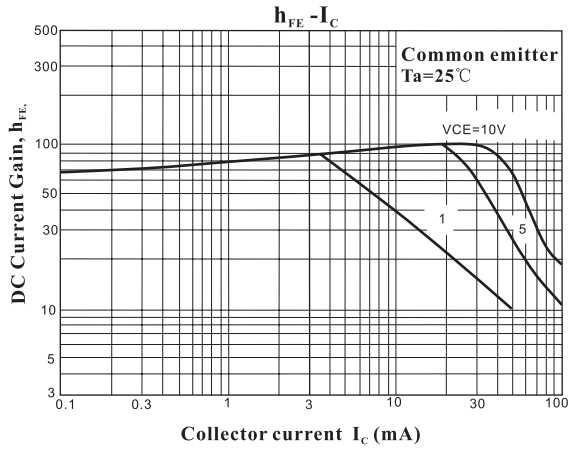

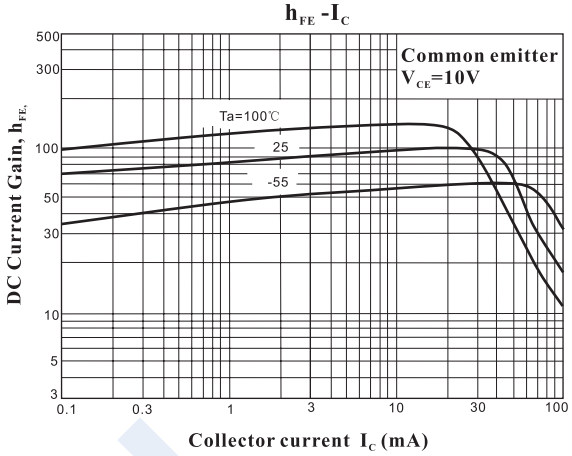

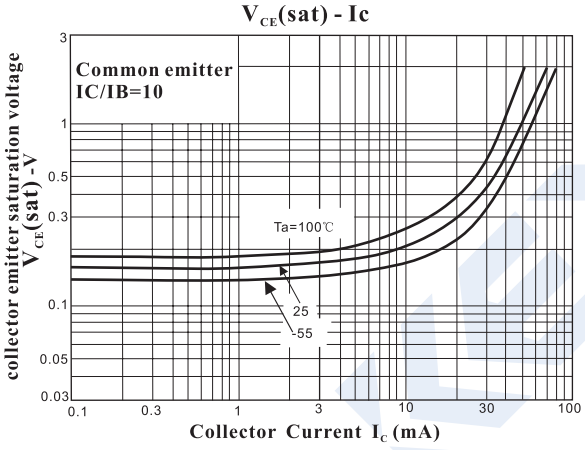

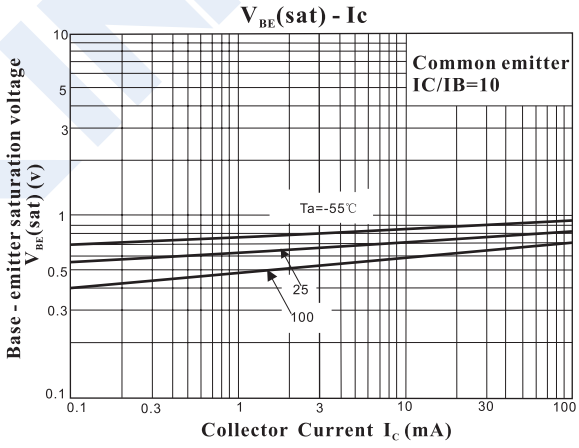

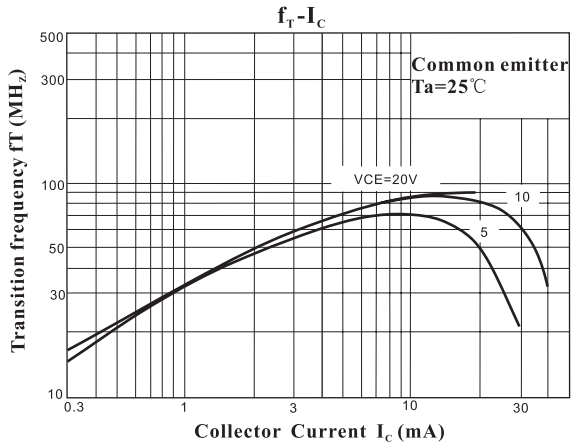

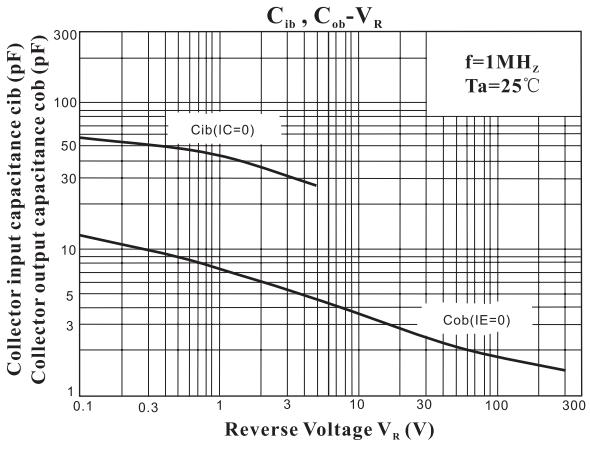

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