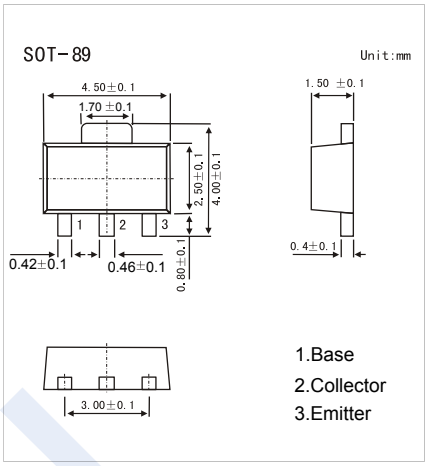
NPN Transistors

2SC5212



■ Features

- Low Collector saturation voltage
- High f_T f_T=180MHz typ
- Excellent liinearity of DC forward current gain
- High collector current I_{CP}=1A
- Complementary to 2SA1946

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	25	V
Collector - Emitter Voltage	V_{CEO}	20	
Emitter - Base Voltage	V_{EBO}	4	
Collector Current - Continuous	I_C	0.7	A
Collector Current - Pulse	I_{CP}	1	
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 100 μA, I_E= 0	25			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1 mA, R_{BE}= ∞	20			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μ A, I_C= 0	4			
Collector-base cut-off current	I_{CBO}	V_{CB}= 25V , I_E= 0			1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= 4V , I_C=0			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B=25mA		0.2	0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=500mA, I_B=25mA			1.2	
DC current gain	h_{FE}	V_{CE}= 4V, I_C= 100mA	150		800	
Transition frequency	f_T	V_{CE}= 6V, I_E= -10mA		180		MHz

■ Classification of h_{fe}

Type	2SC5212- E	2SC5212- F	2SC5212- G
Range	150-300	250-500	400-800
Marking	UE	UF	UG

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■ Typical Characterisitics