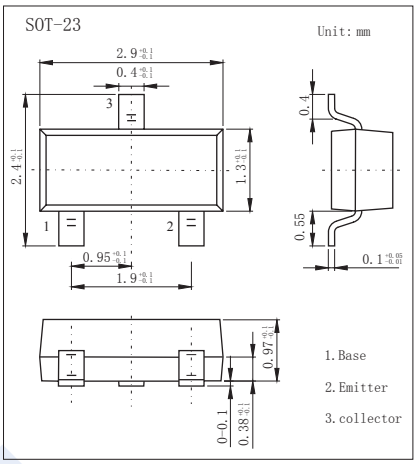
NPN Transistors

2SC2776



■ Features

- Collector Current Capability I_C=30mA
- Collector Emitter Voltage V_{CEO}=20V

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	30	V
Collector - Emitter Voltage	V_{CEO}	20	
Emitter - Base Voltage	V_{EBO}	4	
Collector Current - Continuous	I_C	30	mA
Collector Power Dissipation	P_C	100	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	30			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1mA, I_B= 0	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}= 30 V , I_E= 0			0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}=4V , I_C=0			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA			1.2	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=10mA, I_B=1mA			2	
DC current gain	h_{FE}	V_{CE}= 6V, I_C=1mA	35		200	
Noise figure	NF	V_{CE} = 6 V, I_C = 1 mA, f = 100 MHz, R_g = 50 Ω		5.5		dB
Power gain	PG	V_{CE} = 6 V, I_C = 1 mA, f = 100 MHz, R_g = 100 Ω, R_L = 550Ω, Unneutralized		17		
Collector output capacitance	C_{ob}	V_{CB}= 10V, I_E=0,f=1MHz		1.1		pF
Transition frequency	f_T	V_{CE}= 6V, I_C= 1mA		320		MHz

■ Classification of h_{fe}

Type	2SC2776-A	2SC2776-B	2SC2776-C
Range	35-70	60-120	100-200
Marking	VA	VB	VC