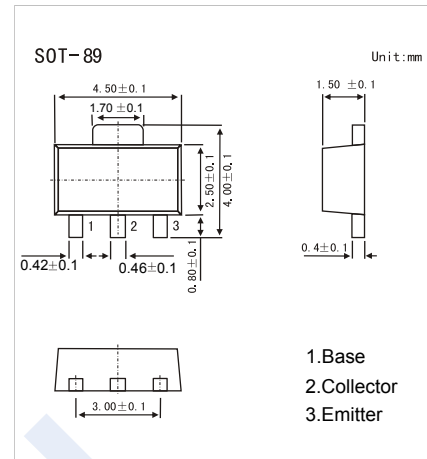


NPN Transistors

2SC4080

■ Features

- High fr.
- High breakdown voltage.
- Complementary to 2SA1575



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	200	V
Collector - Emitter Voltage	V _{CEO}	200	
Emitter - Base Voltage	V _{EBO}	4	
Collector Current - Continuous	I _C	100	mA
Collector Current - Pulse	I _{CP}	200	
Collector Power Dissipation	P _C	500	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = 100 μA, I _E = 0	200			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = 1 mA, R _{BE} = ∞	200			
Emitter - base breakdown voltage	V _{EBO}	I _E = 100 μA, I _C = 0	4			
Collector-base cut-off current	I _{CB0}	V _{CB} = 150V, I _E = 0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 4V, I _C =0			1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =20 mA, I _B =2mA			1	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =20 mA, I _B =2mA			1	
DC current gain	h _{FE}	V _{CE} = 10V, I _C = 10mA	40		320	
		V _{CE} = 10V, I _C = 60mA	20			
Reverse transfer capacitance	C _{re}	V _{CB} = 30V, f=1MHz		1.4		pF
Collector output capacitance	C _{ob}	V _{CB} = 30V, f=1MHz		1.8		
Transition frequency	f _T	V _{CE} = 30V, I _C = 30mA		400		MHz

■ Classification of h_{FE}(1)

Type	2SC4080-C	2SC4080-D	2SC4080-E	2SC4080-F
Range	40-80	60-120	100-200	160-320
Marking	CIC	CID	CIE	CIF