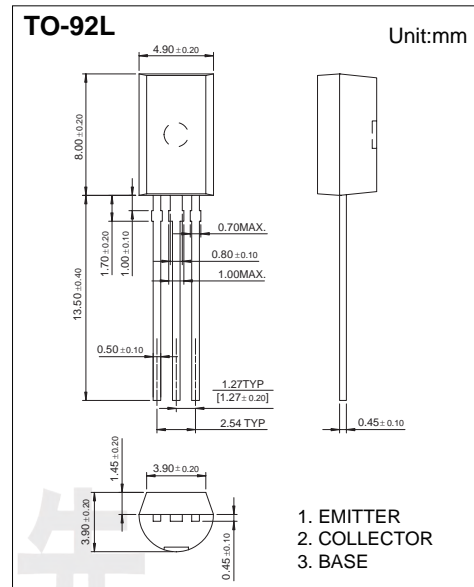


NPN Transistors D5609

■ Features

- Excellent Linearity of Current Gain
- Low saturation voltage
- Complementary to D5610



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	25	V
Collector - Emitter Voltage	V_{CE0}	20	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_C	1	A
Collector Power Dissipation	P_C	750	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to 150	

Transistor

NPN Transistors D5609

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	V _{CB0}	I _C = 10 μA, I _E =0	25			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = 1 mA, I _B =0	20			
Emitter - base breakdown voltage	V _{EBO}	I _E = 10 μA, I _C =0	5			
Collector cut-off current	I _{CBO}	V _{CB} = 20 V, I _E =0			1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _C =0			1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =800 mA, I _B =80 mA			0.5	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =800 mA, I _B =80 mA			1.2	
Base-emitter voltage	V _{BE}	V _{CE} = 2V, I _C = 500mA			1	
DC current gain	h _{FE}	V _{CE} = 2V, I _C = 500mA	60		240	
Output capacitace	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		22		pF
Transition frequency	f _T	V _{CE} = 2V, I _C = 500mA		190		MHz

■ Classification of hFE

Rank	A	B	C
Range	60-120	85-170	120-240

Transistor

NPN Transistors D5609

Typical Characteristics

