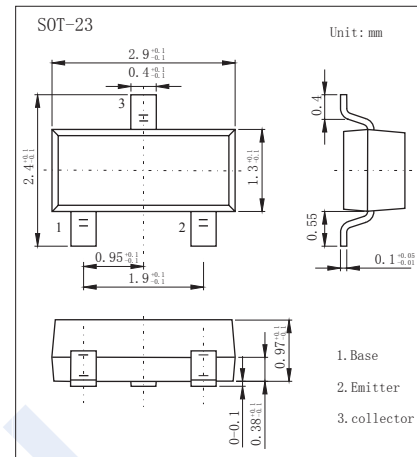


NPN Transistors

2SC4432-HF

■ Features

- High power gain.
- High cutoff frequency.
- Complementary to 2SA1815-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	40	V
Collector - Emitter Voltage	V _{CE0}	18	
Emitter - Base Voltage	V _{EB0}	3	
Collector Current - Continuous	I _C	50	mA
Collector Power Dissipation	P _C	250	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	40			V
Collector- emitter breakdown voltage	V _{CE0}	I _C = 1 mA, I _B = 0	18			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _C = 0	3			
Collector-base cut-off current	I _{CB0}	V _{CB} = 30V, I _E = 0			0.1	μA
Emitter cut-off current	I _{EB0}	V _{EB} = 2V, I _C = 0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA			0.2	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =10mA, I _B =1mA			1.2	
DC current gain	h _{FE}	V _{CE} = 10V, I _C = 5 mA	60		270	
Power Gain	PG	V _{CE} = 10V, I _C = 10mA, f=100MHz		28		dB
Base-to-Collector Time Constant	τ _{bb'CC}	V _{CE} = 10V, I _C = 5 mA, f=31.9 MHz			23	ps
Reverse Transfer Capacitance	C _{re}	V _{CB} = 10V, f=1MHz		0.45		pF
Collector output capacitance	C _{ob}	V _{CB} = 10V, f=1MHz		0.7	1.2	
Transition frequency	f _T	V _{CE} = 10V, I _C = 5mA		750		MHz

■ Classification of h_{FE}

Type	2SC4432-RT3-HF	2SC4432-RT4-HF	2SC4432-RT5-HF
Range	40-80	60-120	160-320
Marking	RT3 _F	RT4 _F	RT5 _F

NPN Transistors

2SC4432-HF

■ Typical Characteristics

