

**2SC4432**

High-Frequency General-Purpose Amplifier Applications

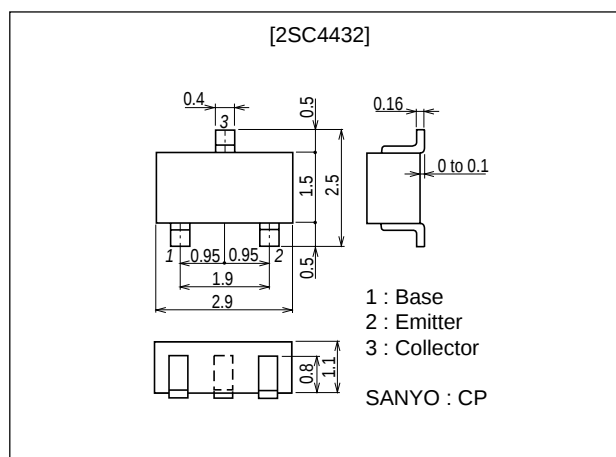
Features

- High power gain.
- High cutoff frequency.
- Small Cob, Cre.
- Ultrasmall-sized package permitting the 2SC4432-applied sets to be made small and slim.

Package Dimensions

unit : mm

2018B



Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		40	V
Collector-to-Emitter Voltage	V _{CEO}		18	V
Emitter-to-Base Voltage	V _{EBO}		3	V
Collector Current	I _C		50	mA
Collector Dissipation	P _C		250	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =18V, I _E =0			0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =2V, I _C =0			0.1	μA
DC Current Gain	h _{FE}	V _{CE} =10V, I _C =5mA	60*		270*	
Gain-Bandwidth Product	f _T	V _{CE} =10V, I _C =5mA		750		MHz
Output Capacitance	C _{ob}	V _{CB} =10V, f=1MHz		0.7	1.2	pF
Reverse Transfer Capacitance	C _{re}	V _{CB} =10V, f=1MHz		0.45		pF

Marking : RT

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* : The 2SC4432 is classified by 5mA h_{FE} as follows :

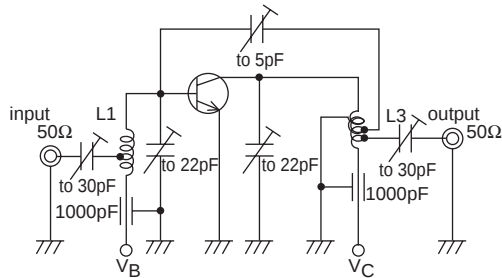
Rank	3	4	5
h _{FE}	60 to 120	90 to 180	135 to 270

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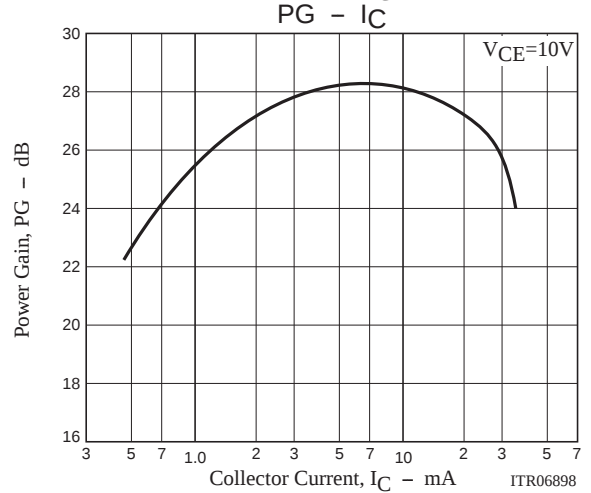
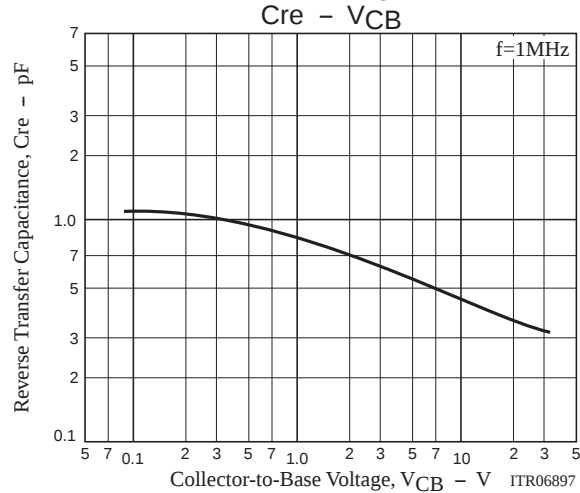
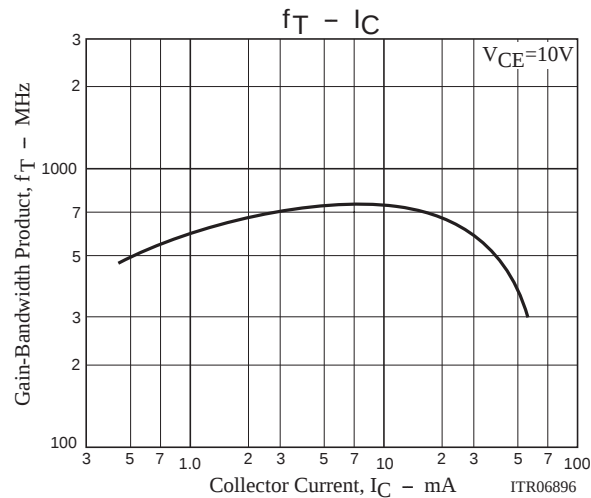
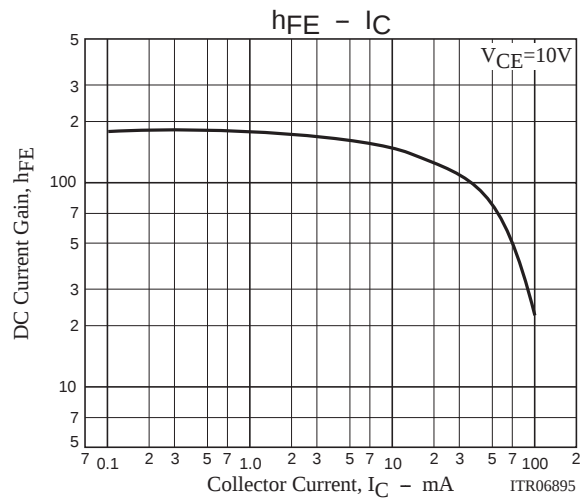
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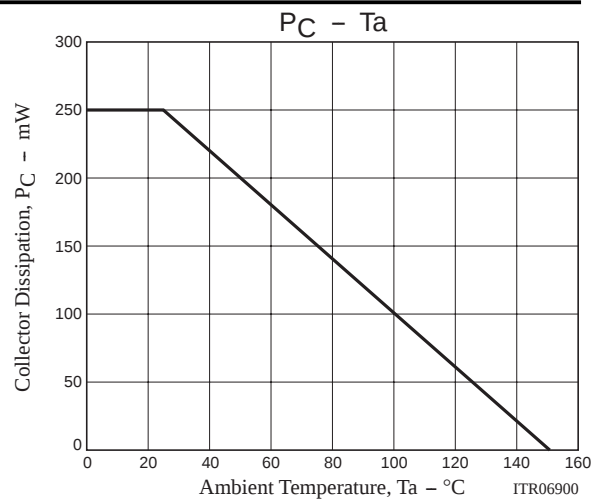
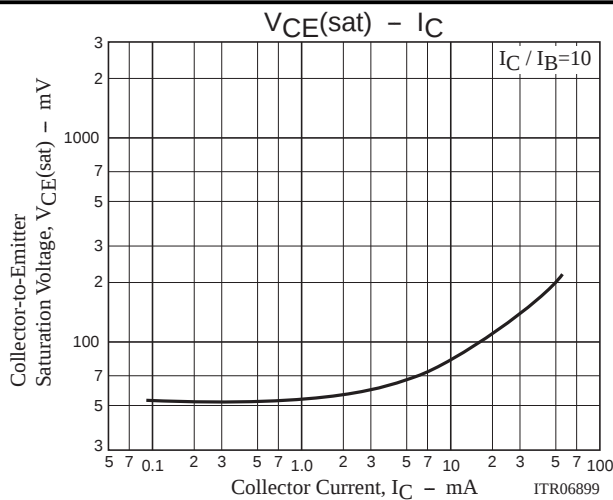
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.2	V
Base-to-Collector Time Constant	$r_{bb'}C_C$	$V_{CE}=10V, I_C=5mA, f=31.9MHz$			23	ps
Power Gain	PG	$V_{CE}=10V, I_C=10mA, f=100MHz$		28		dB

PG Test Circuit



- L1 : 1mmφ plated wire, 10mmφ 5T, pitch 15mm, tap : 2T from base side
- L2 : 1mmφ plated wire, 10mmφ 7T, pitch 10mm, tap : 2T from V_C side
- L3 : 1mmφ enamel wire, 10mmφ 3T, pitch 10mm





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