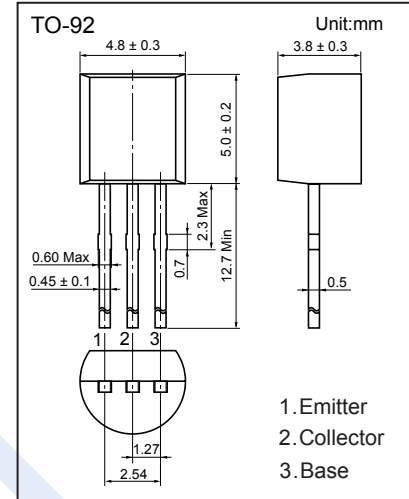


NPN Transistors

KTC3198

■ Features

- Excellent hFE Linearity
- Low Noise
- Complementary to KTA1266



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	60	V
Collector - Emitter Voltage	V _{CEO}	50	
Emitter - Base Voltage	V _{EBO}	5	
Collector Current - Continuous	I _c	150	mA
Base Current	I _B	50	
Collector Power Dissipation	P _C	625	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 = 100uA, I _E = 0	60			V
Collector- emitter breakdown voltage	V _{CEO}	I _c = 1 mA, I _B =0	50			
Emitter - base breakdown voltage	V _{EBO}	I _E = 100uA, I _c = 0	5			
Collector-base cut-off current	I _{CB0}	V _{CB} = 60 V, I _E = 0			0.1	uA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _c =0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =100mA, I _B =10mA			0.25	V
Base - emitter saturation voltage	V _{BE(sat)}	I _c =100mA, I _B =10mA			1	
DC current gain	h _{FE}	V _{CE} = 6V, I _c =2mA	70		700	
		V _{CE} = 6V, I _c =150mA	25			
Base intrinsic resistance	r _{bb'}	V _{CB} = 10V, I _c = -1mA, f=30MHz		50		Ω
Noise Figure	NF	V _{CE} = 6V, I _c = 0.1mA, R _g =10KΩ, f=3MHz			10	dB
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f=1MHz			3.5	pF
Transition frequency	f _T	V _{CE} = 10V, I _E = -1mA	80			MHz

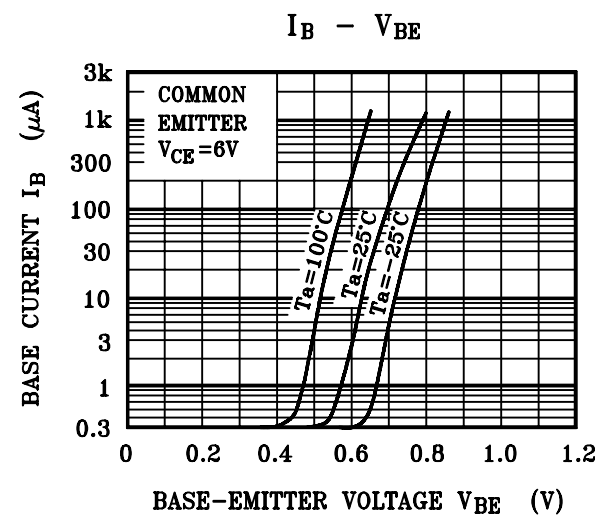
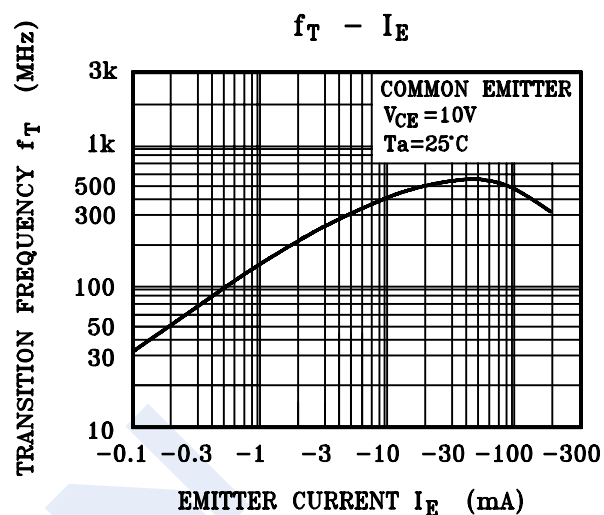
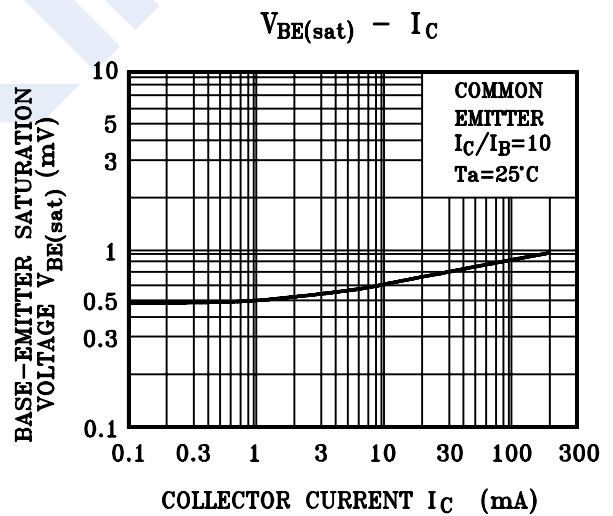
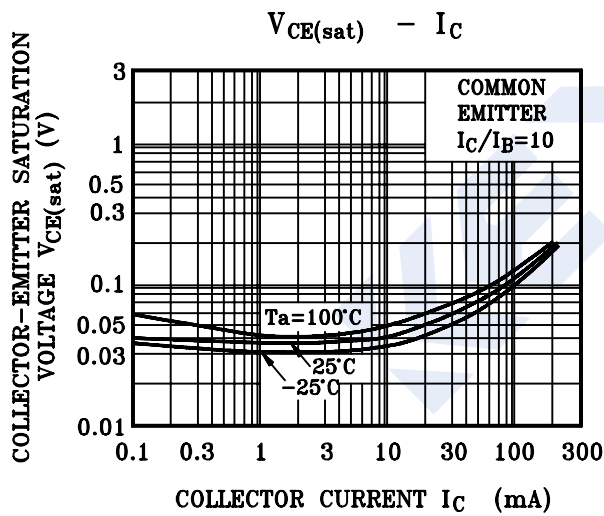
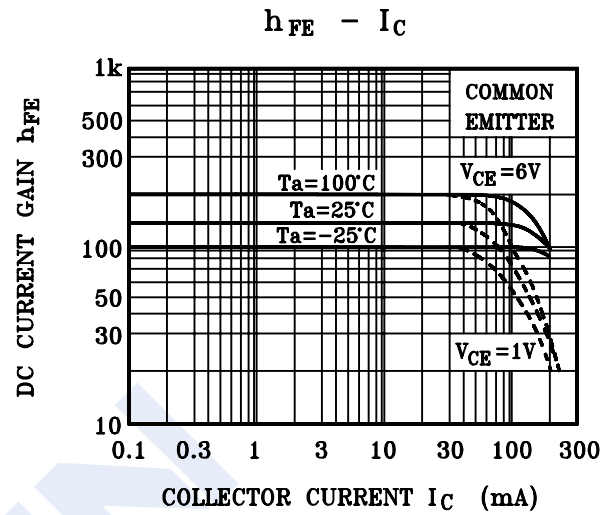
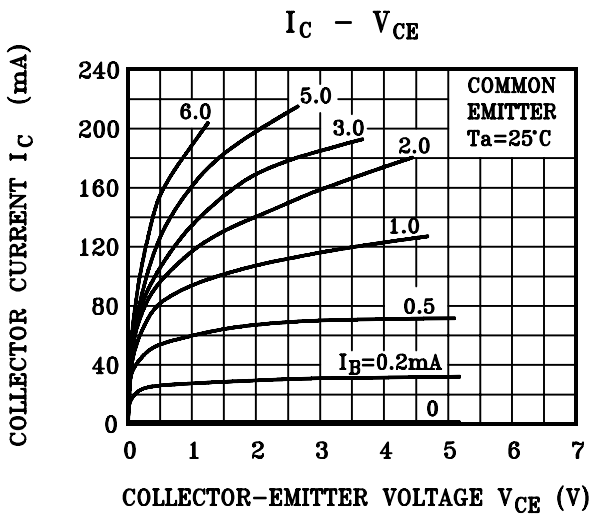
■ Classification of h_{FE}(1)

Type	KTC3198-O	KTC3198-Y	KTC3198-GR	KTC3198-BL
Range	70-140	120-240	200-400	300-700

NPN Transistors

KTC3198

■ Typical Characteristics

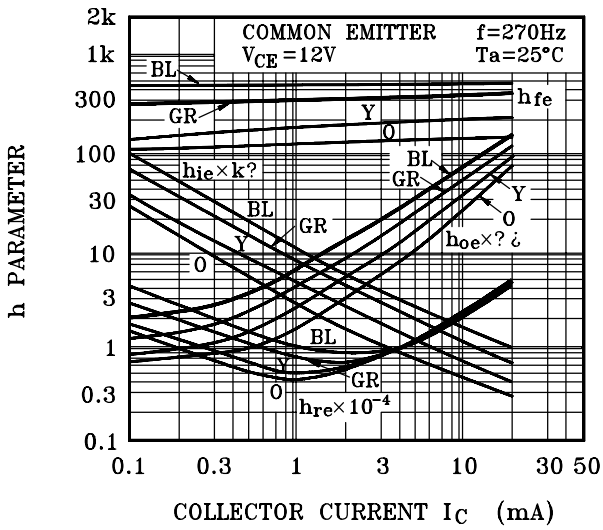


NPN Transistors

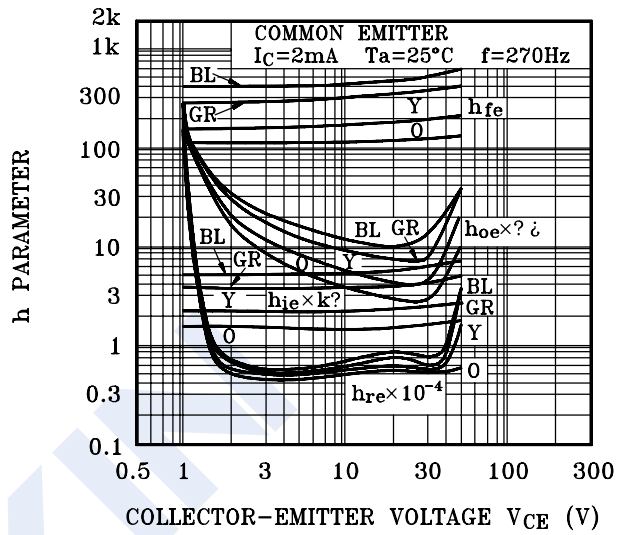
KTC3198

■ Typical Characteristics

h PARAMETER - I_C



h PARAMETER - V_{CE}



P_C - T_a

