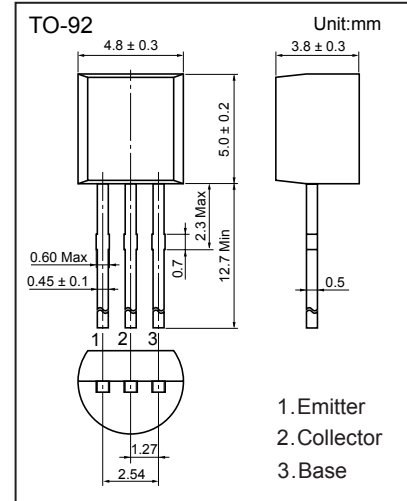




### ■ Features

- Excellent hFE Linearity
- Low Noise
- Complementary to KTA1266



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

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	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 150	

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

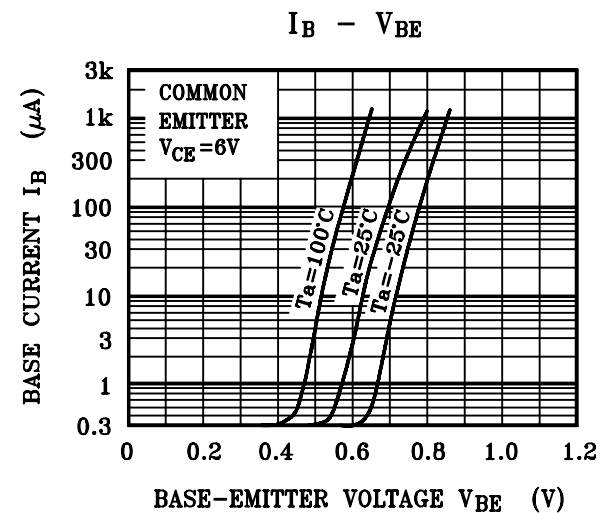
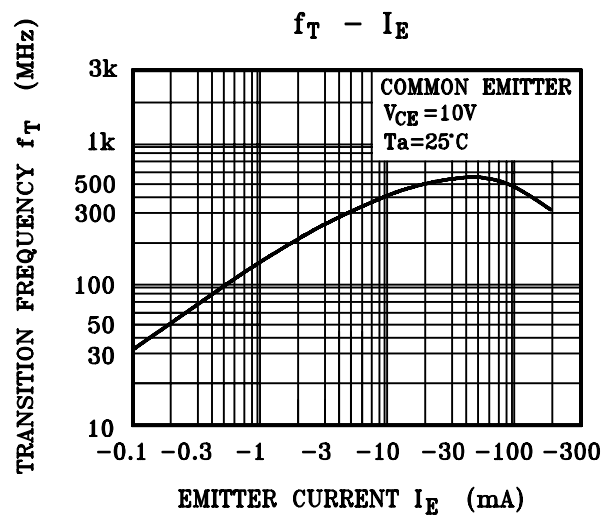
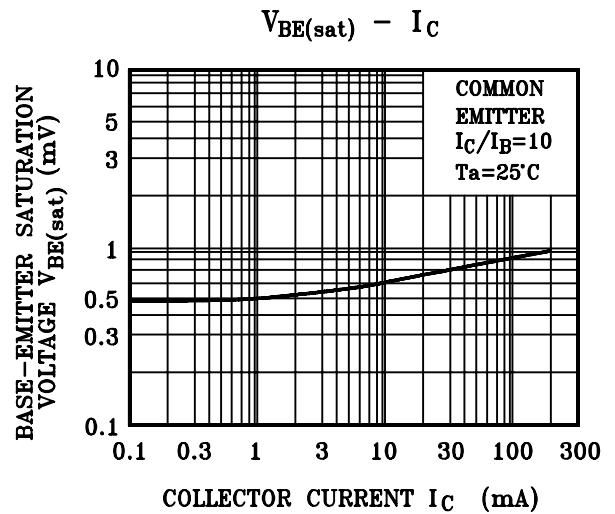
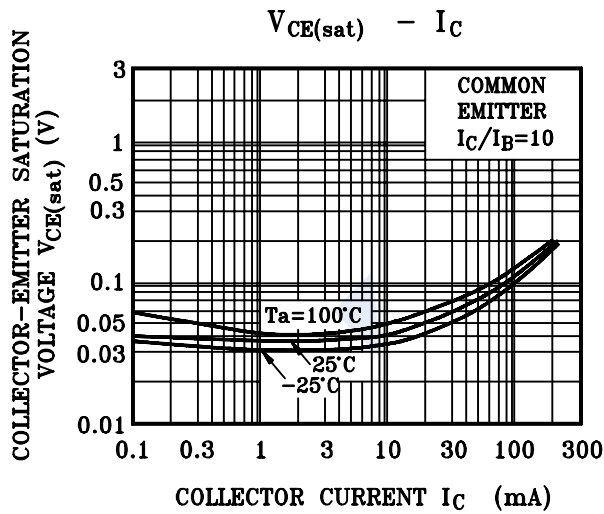
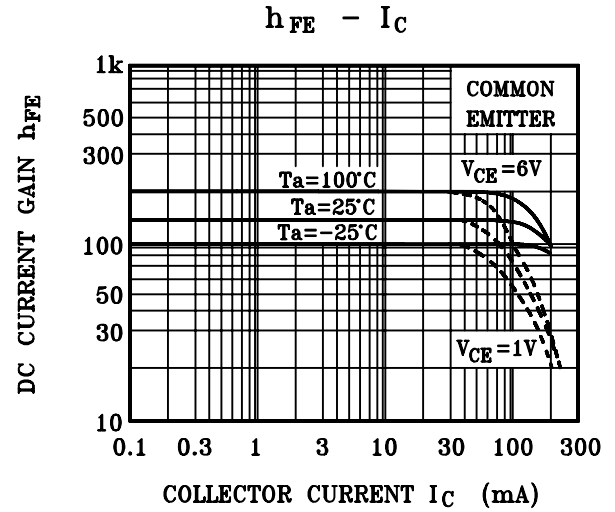
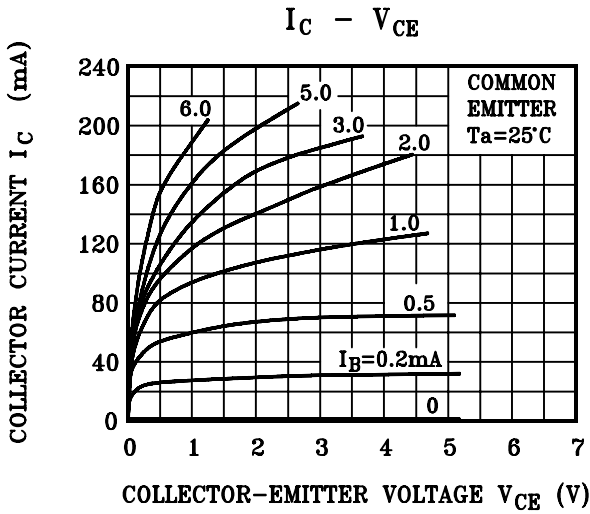
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c = 100\mu\text{A}$ , $I_E = 0$	60			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_c = 1\text{mA}$ , $I_B = 0$	50			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = 100\mu\text{A}$ , $I_c = 0$	5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = 60\text{V}$ , $I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5\text{V}$ , $I_c = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 100\text{mA}$ , $I_B = 10\text{mA}$			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 100\text{mA}$ , $I_B = 10\text{mA}$			1	
DC current gain	$h_{FE}$	$V_{CE} = 6\text{V}$ , $I_c = 2\text{mA}$	70		700	
		$V_{CE} = 6\text{V}$ , $I_c = 150\text{mA}$	25			
Base intrinsic resistance	$r_{bb'}$	$V_{CB} = 10\text{V}$ , $I_c = -1\text{mA}$ , $f = 30\text{MHz}$		50		$\Omega$
Noise Figure	NF	$V_{CE} = 6\text{V}$ , $I_c = 0.1\text{mA}$ , $R_g = 10\text{K}\Omega$ , $f = 3\text{MHz}$			10	dB
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$			3.5	pF
Transition frequency	$f_T$	$V_{CE} = 10\text{V}$ , $I_E = -1\text{mA}$	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



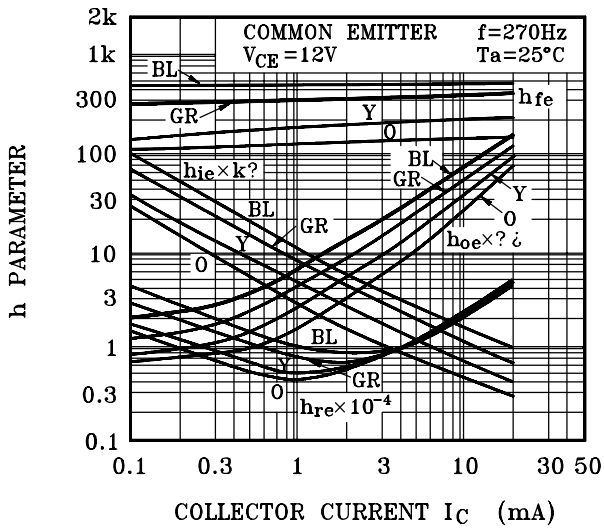
■ Typical Characteristics



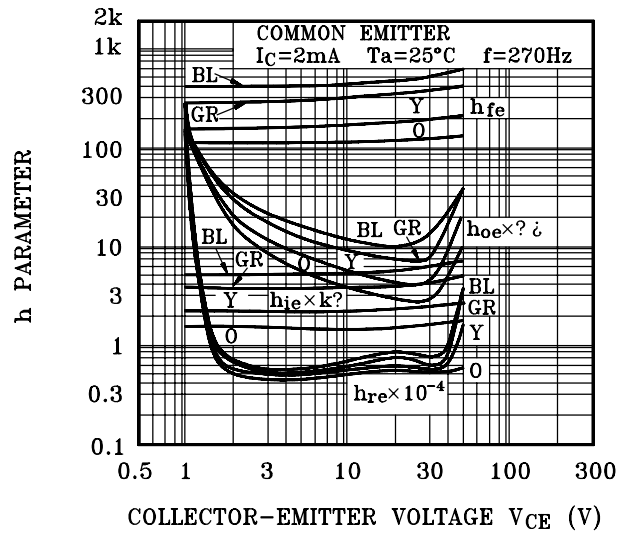


■ Typical Characteristics

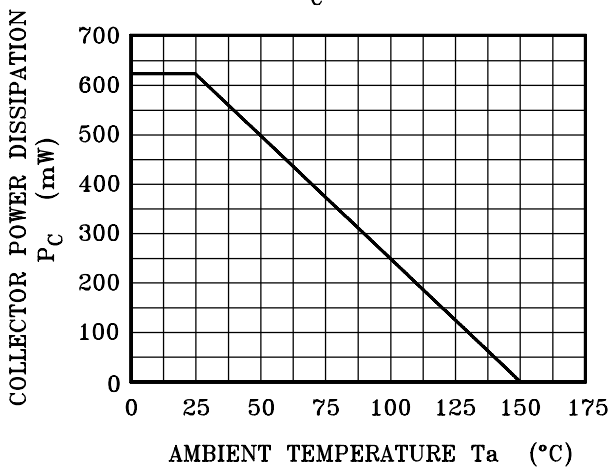
h PARAMETER -  $I_C$



h PARAMETER -  $V_{CE}$



$P_C$  -  $T_a$



Package	Packing	Quantity	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	Bulk	1000pcs/BP	10,000pcs	245×170×100	100,000pcs	525×375×270
TO-92	Tape	2000pcs/TP	2000pcs	333×162×43	20,000pcs	350×340×250