

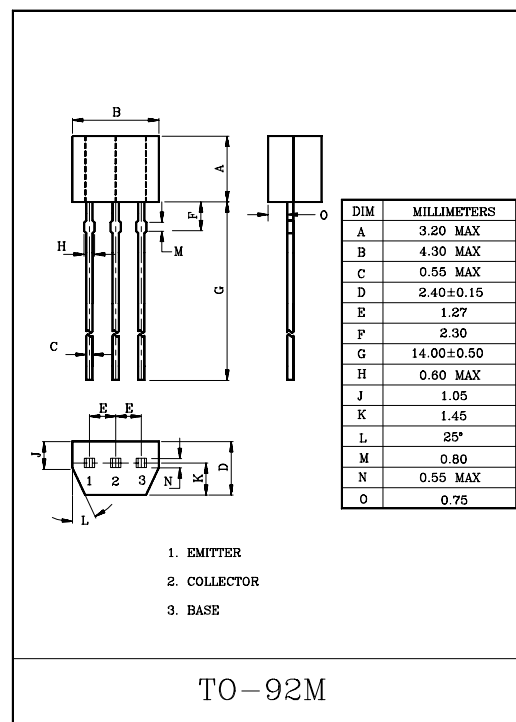
GENERAL PURPOSE APPLICATION,
SWITCHING APPLICATION.

FEATURES

- High DC Current Gain : h_{FE} -70~700.
- Excellent h_{FE} Linearity
: $F_{FE}(0.1mA)/h_{FE}(2mA)=0.95$ (Typ.).
- Low Noise : NF-1dB(Typ.), 10dB(Max.).
- Complementary to KTA1217.

MAXIMUM RATINGS (Ta=25°C)

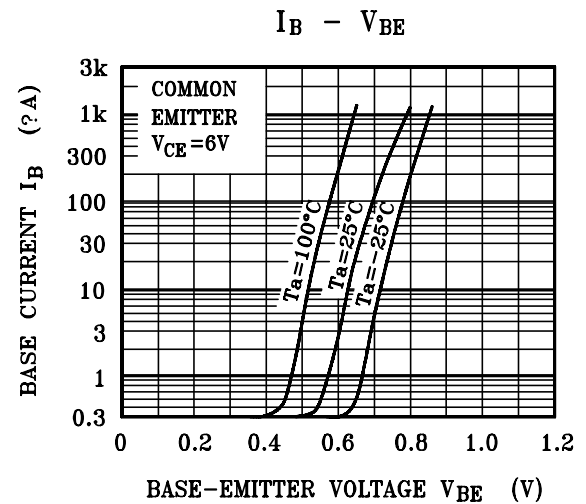
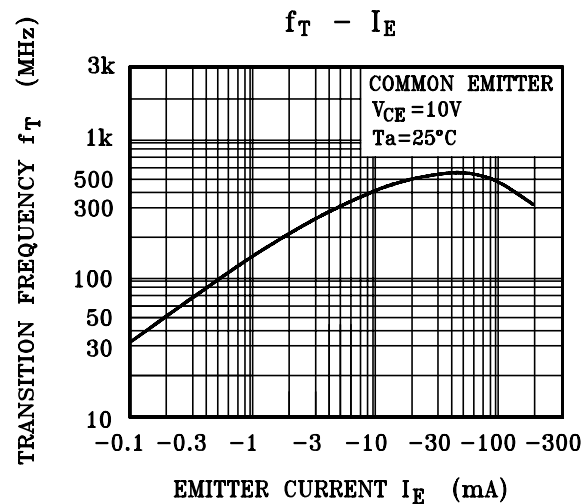
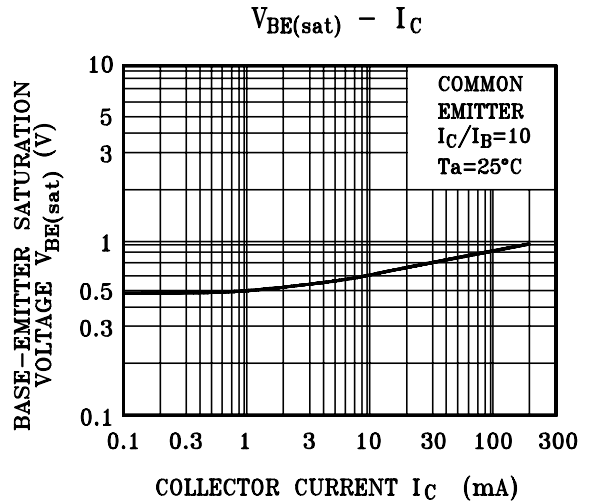
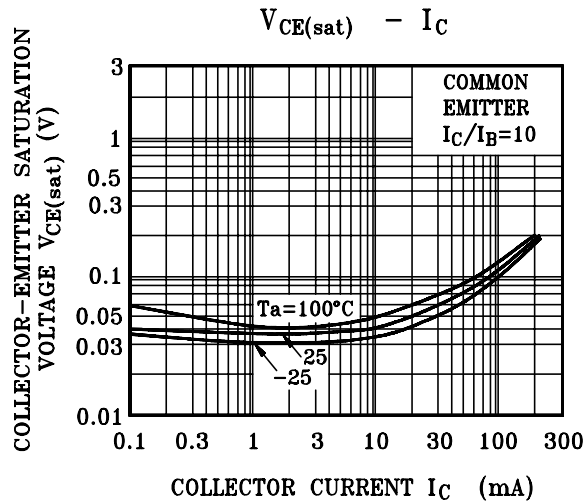
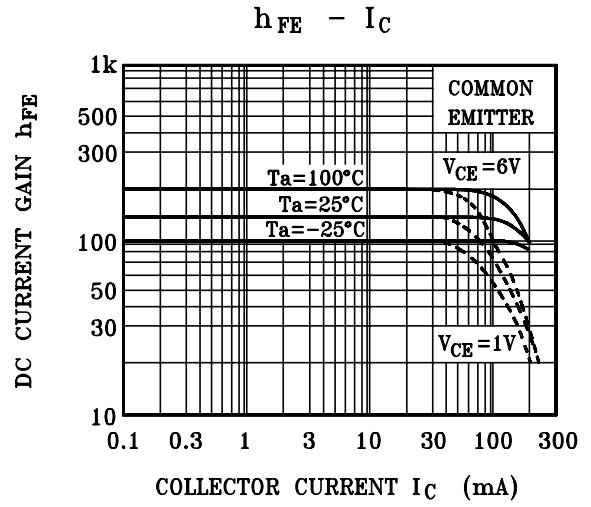
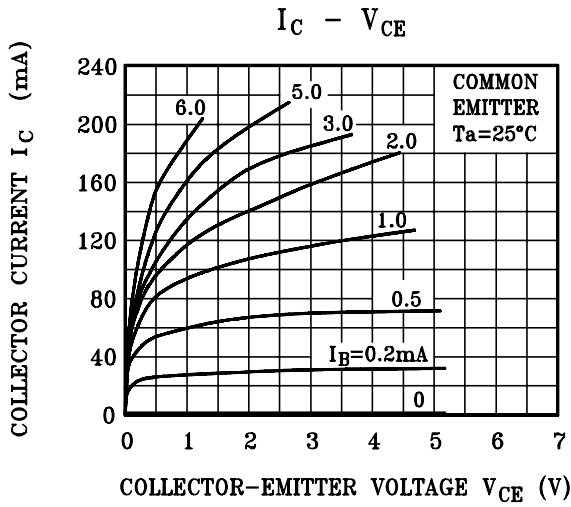
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector Base Voltage	V_{CB0}	50	V
Collector Emitter Voltage	V_{CE0}	50	V
Emitter Base Voltage	V_{EB0}	5	V
Collector Current	I_C	150	mA
Emitter Current	I_E	150	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{C0}	$V_{CE}=50V, I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{E0}	$V_{EB}=5V, I_C=0$	-	-	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=5V, I_C=2mA$	70	-	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_E=10mA$		0.1	0.25	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=1mA$	80	-	-	MHz
Collector Output Capacitance	C_{co}	$V_{CE}=10V, I_E=0, f=1MHz$	-	2.0	3.5	pF
Noise Figure	NF	$V_{CE}=5V, I_C=0.1mA$ $R_g=10k\Omega, f=1kHz$		1.0	15	dB

Note) h_{FE} Classification : O : 70~140, Y : 120~240, GR : 200~400, BL : 300~700



KTC3199

