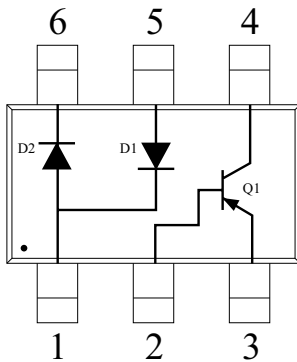


TV Control board Application

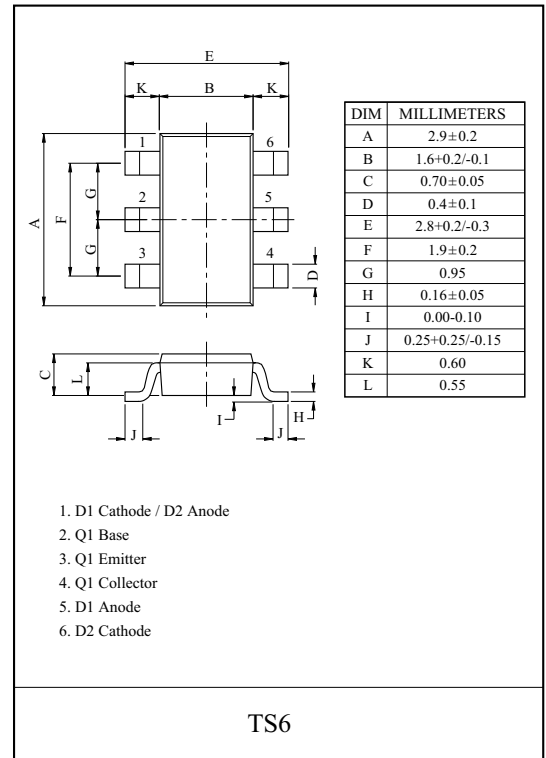
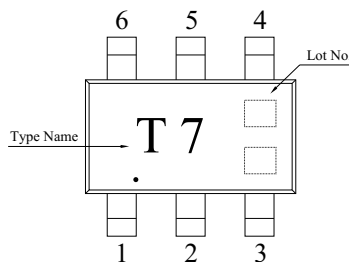
### FEATURES

- One PNP Transistor (Q1)
- Two Switching Diode (D1, D2)
- Low Saturation Voltage  
:  $V_{CE(sat)} = -0.25V(\text{Max}) @ I_C = -100\text{mA}, I_B = -10\text{mA}$

### EQUIVALENT CIRCUIT (TOP VIEW)



Marking



### MAXIMUM RATING (Ta=25 )

#### TRANSISTOR

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-80	V
Collector-Emitter Voltage	$V_{CEO}$	-80	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-500	mA
Base Current	$I_B$	-100	mA

#### DIODE

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage	$V_{RM}$	80	V
Reverse Voltage	$V_R$	80	V
Maximum (Peak) Forward Current	$I_{FM}$	300	mA
Average Forward Current	$I_O$	200	mA
Surge Current (100μs)	$I_{FSM}$	4	A

#### COMMON

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Dissipation	$*P_D$	900	mW
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55~150	

\* : Package mounted on a ceramic board (600mm<sup>2</sup> × 0.8mm)

# KTX711T

## ELECTRICAL CHARACTERISTICS (Ta=25 )

### TRANSISTOR

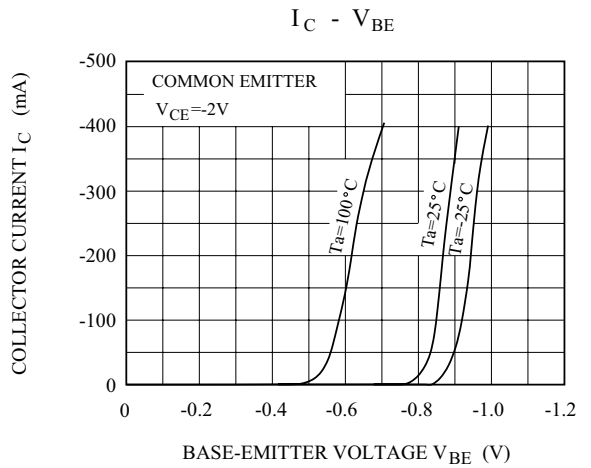
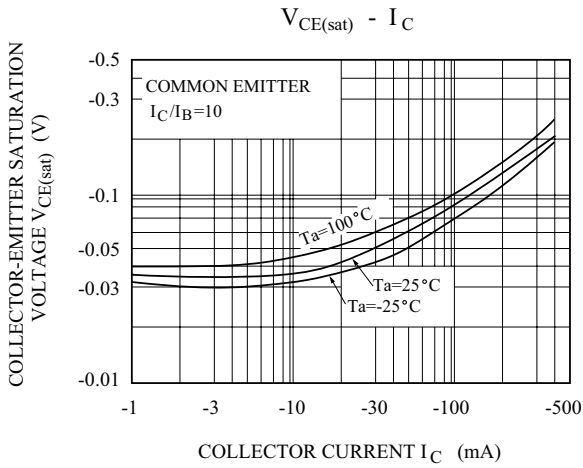
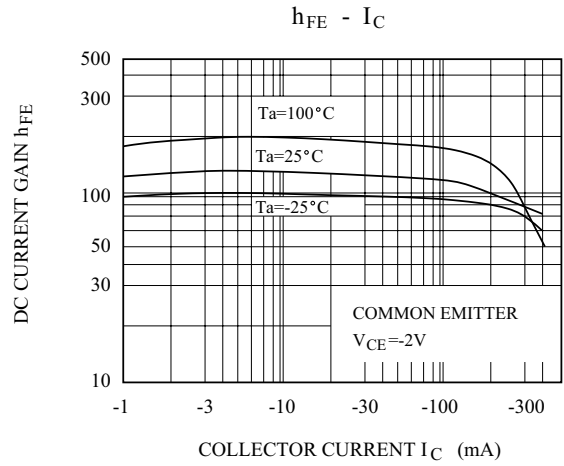
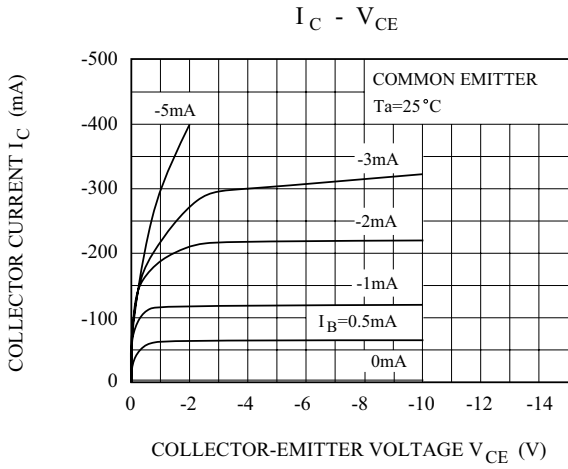
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=80V, I_E=0$	-	-	-0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$	-	-	-0.1	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-80	-	-	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-1V, I_C=-10mA$	100	-	-	
	$h_{FE(2)}$	$V_{CE}=-1V, I_C=-100mA$	100	-	250	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$	-	-	-0.25	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=-1V, I_C=-100mA$	-	-	-1.2	V
Transition Frequency	$f_T$	$V_{CE}=-2V, I_C=-10mA$	100	-	-	MHz

## ELECTRICAL CHARACTERISTICS (Ta=25 )

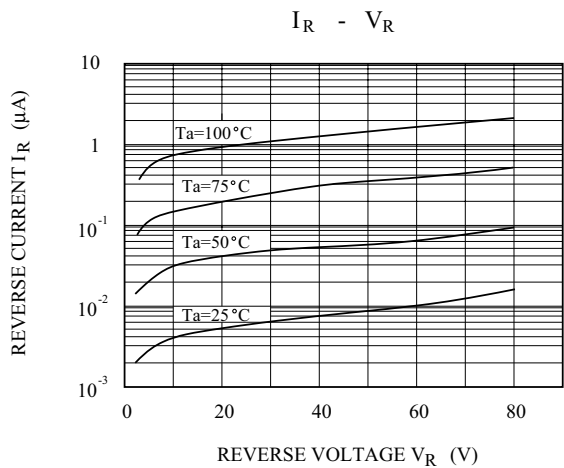
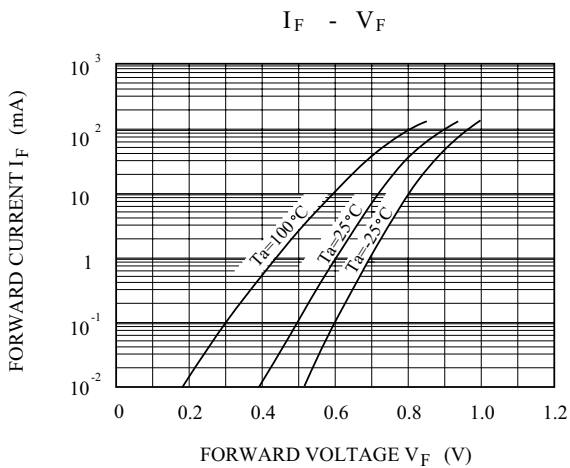
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	$I_F=1mA$	-	0.60	-	V
	$V_{F(2)}$	$I_F=10mA$	-	0.72	-	
	$V_{F(3)}$	$I_F=100mA$	-	0.90	1.20	
Reverse Current	$I_R$	$V_R=80V$	-	-	0.1	$\mu A$
Total Capacitance	$C_T$	$V_R=0V, f=1MHz$	-	0.9	3.0	pF
Reverse Recovery Time	$t_{rr}$	$I_F=10mA$	-	1.6	4.0	nS

# KTX711T

## Q1 (NPN TRANSISTOR)



## D1, D2 (SWITCHING DIODE)



# KTX711T

