

KEC

KOREA ELECTRONICS CO.,LTD.

**SEMICONDUCTOR
TECHNICAL DATA****KTC4370A**

EPITAXIAL PLANAR NPN TRANSISTOR

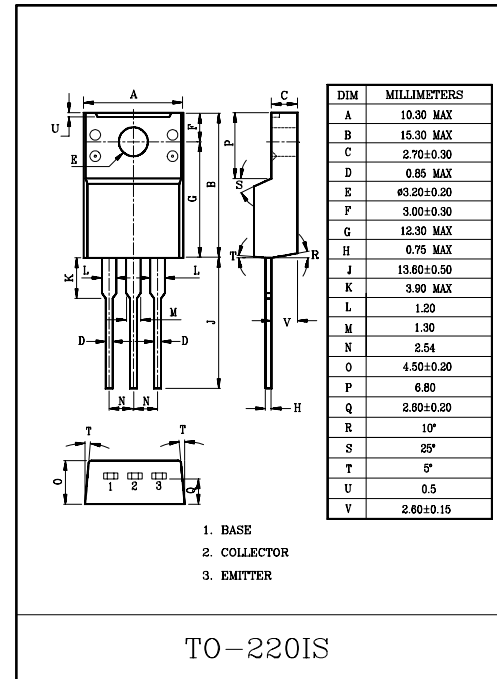
HIGH VOLTAGE APPLICATION.

FEATURES

- High Transition Frequency : $f_T=100\text{MHz(Typ.)}$.
- Complementary to KTA1659A.

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	180	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Base Current	I_B	0.15	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	20	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=160\text{V}, I_E=0$	-	-	1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	-	-	1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	180	-	-	V
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=5\text{V}, I_C=100\text{mA}$	70	-	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$	-	-	1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5\text{V}, I_C=500\text{mA}$	-	-	1.0	V
Transition Frequency	f_T	$V_{CE}=10\text{V}, I_C=100\text{mA}$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	25	-	pF

Note: h_{FE} Classification O:70~140, Y:120~240