

SEMICONDUCTOR TECHNICAL DATA

KTC200

EPITAXIAL PLANAR NPN TRANSISTOR

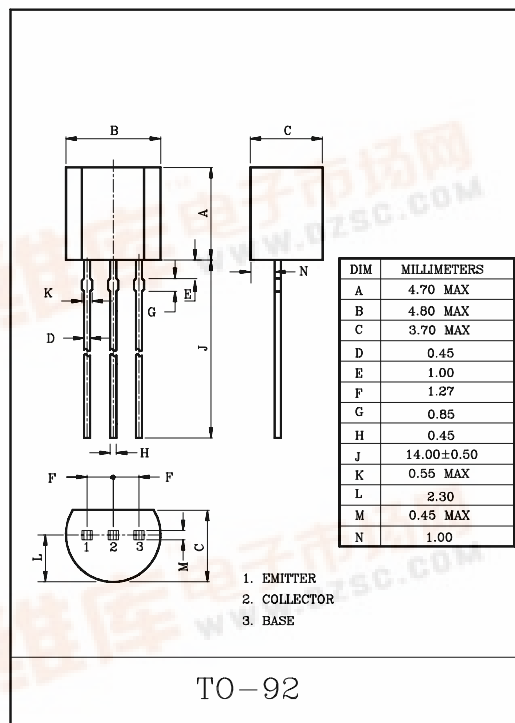
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- Excellent h_{FE} Linearity
: $h_{FE}(2)=25(\text{Min.})$, ($V_{CE}=2V$, $I_C=200\text{mA}$).
- Complementary to KTA200.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Emitter Current	I_E	-500	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=50V$, $I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V$, $I_C=0$	-	-	0.1	μA
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=2V$, $I_C=50\text{mA}$	70	-	240	
	$h_{FE}(2)$	$V_{CE}=2V$, $I_C=200\text{mA}$	25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}$, $I_B=10\text{mA}$	-	-	0.25	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=2V$, $I_C=200\text{mA}$	-	-	1.0	V
Transition Frequency	f_T	$V_{CE}=6V$, $I_C=20\text{mA}$	-	300	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=6V$, $I_E=0$, $f=1\text{MHz}$	-	7.0	-	pF

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

KTC200

