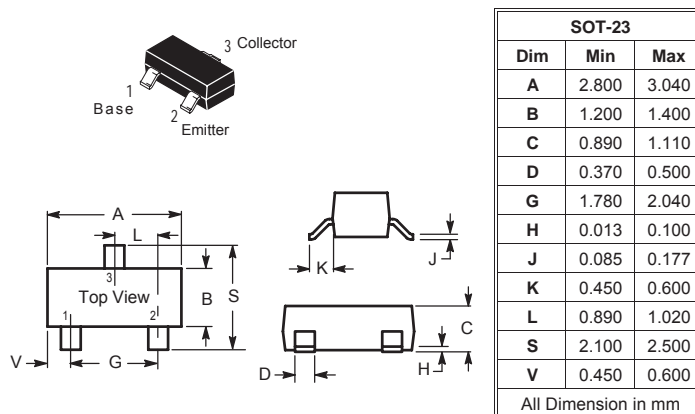


RoHS Compliant Product  
A suffix of "-C" specifies halogen and lead free

## FEATURES

- High emitter-base voltage:  $V_{EBO}=12V(\text{Min})$
- low on resistance:  $R_{on}=0.6\Omega(\text{max})(I_B=1\text{mA})$

## PACKAGE DIMENSIONS



## ABSOLUTE MAXIMUM RATINGS at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CBO}$	25	V
Collector to Emitter Voltage	$V_{CEO}$	20	V
Emitter to Base Voltage	$V_{EBO}$	12	V
Collector Current - Continuous	$I_C$	300	mA
Collector Power Dissipation	$P_C$	200	mW
Junction, Storage Temperature	$T_J, T_{STG}$	+150, -55 ~ +150	$^\circ\text{C}$

## CHARACTERISTICS at $T_a = 25^\circ\text{C}$

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
$BV_{CBO}$	25	-	-	V	$I_C = 100 \mu\text{A}$
$BV_{CEO}$	20	-	-	V	$I_C = 1 \text{ mA}$
$BV_{EBO}$	12	-	-	V	$I_E = 100 \mu\text{A}$
$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB} = 25 \text{ V}$
$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB} = 12 \text{ V}$
$h_{FE1}(\text{FORWARD})$	200	-	1000		$V_{CE} = 2 \text{ V}, I_C = 4 \text{ mA}$
$h_{FE1}(\text{REVERSE})$	20	-	-		$V_{CE} = 2 \text{ V}, I_C = 4 \text{ mA}$
$V_{CE(\text{sat})}$	-	-	0.25	V	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$
$V_{BE(\text{sat})}$	-	-	1	V	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$
$f_T$	-	60	-	MHz	$V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}, f = 100 \text{ MHz}$
$C_{OB}$	-	10	-	pF	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$
$R_{(ON)}$	-	0.6	-	$\Omega$	$V_{IN} = 0.3 \text{ V}, I_B = 1 \text{ mA}, f = 1 \text{ KHz}$

**CHARACTERISTIC CURVES**

**KTD1304**

