

KSE2955T

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General Purpose and Switching Applications

- DC Current Gain Specified to $I_C = 10 \text{ A}$
- High Current Gain Bandwidth Product : $f_T = 2\text{MHz}$ (Min.)



TO-220
1.Base 2.Collector 3.Emitter

PNP Silicon Transistor

Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 70	V
V_{CEO}	Collector-Emitter Voltage	- 60	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current	- 10	A
I_B	Base Current	- 6	A
P_C	Collector Dissipation ($T_C=25^\circ\text{C}$)	75	W
	Collector Dissipation ($T_a=25^\circ\text{C}$)	0.6	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CEO}	Collector- Emitter Breakdown Voltage	$I_C = - 200\text{mA}, I_B = 0$	-60		V
I_{CEO}	Collector Cut-off Current	$V_{CE} = - 30\text{V}, I_B = 0$		-700	μA
I_{CEX1}	Collector Cut-off Current	$V_{CE} = - 70\text{V}, V_{BE}(\text{off}) = 1.5\text{V}$		-1	mA
I_{CEX2}	Collector Cut-off Current	$V_{CE} = - 70\text{V}, V_{BE}(\text{off}) = 1.5\text{V}$ @ $T_C = 150^\circ\text{C}$		-5	mA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = - 5\text{V}, I_C = 0$		-5	mA
h_{FE}	* DC Current Gain	$V_{CE} = - 4\text{V}, I_C = - 4\text{A}$ $V_{CE} = - 4\text{V}, I_C = - 10\text{A}$	20 5	100	
$V_{CE}(\text{sat})$	* Collector-Emitter Saturation Voltage	$I_C = - 4\text{A}, I_B = - 0.4\text{A}$		-1.1	V
		$I_C = - 10\text{A}, I_B = - 3.3\text{A}$		-8	V
$V_{BE}(\text{on})$	* Base-Emitter On Voltage	$V_{CE} = - 4\text{V}, I_C = - 4\text{A}$		-1.8	V
f_T	Current Gain Bandwidth Product	$V_{CE} = - 10\text{V}, I_C = - 500\text{mA}$	2		MHz

* Pulse test: $PW \leq 300\mu\text{s}$, duty cycle $\leq 2\%$ Pulse

Typical Characteristic

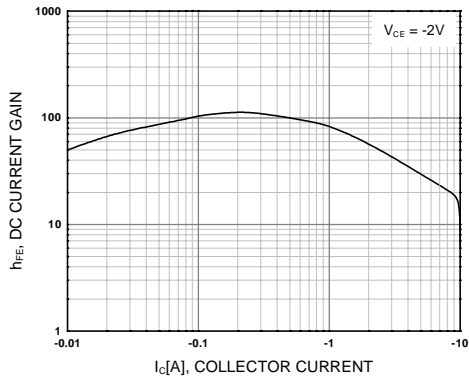


Figure 1. DC current Gain

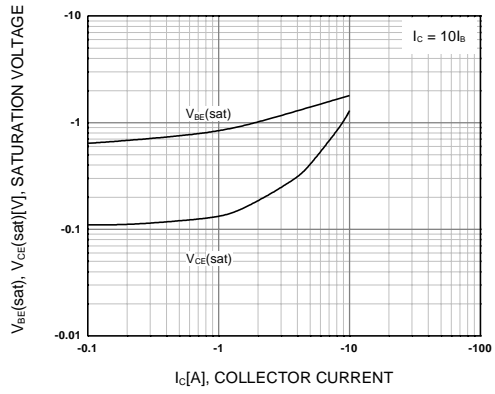


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

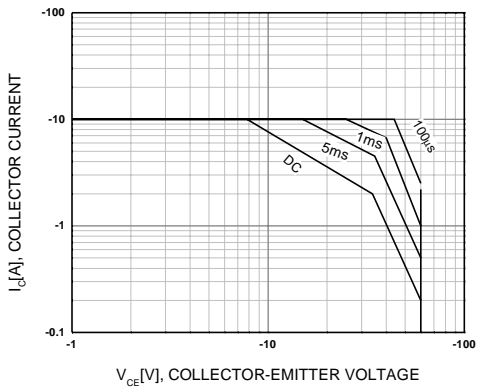


Figure 3. Safe Operating Area

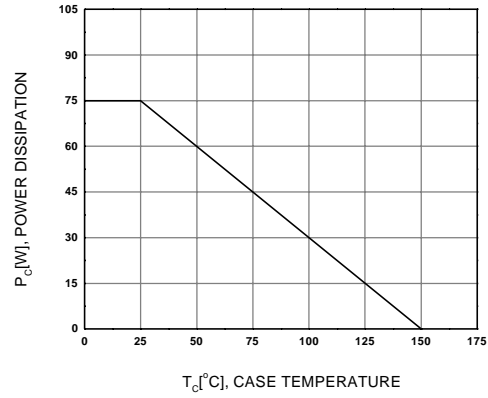
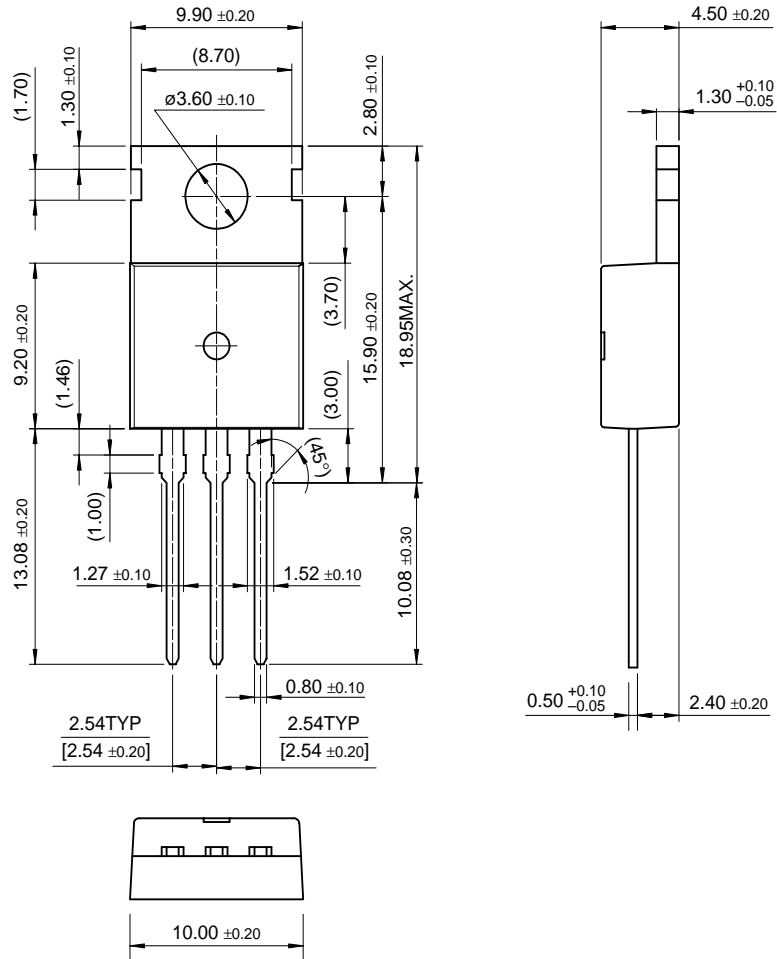


Figure 4. Power Derating

Package Dimensions

KSE2955T

TO-220



Dimensions in Millimeters

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