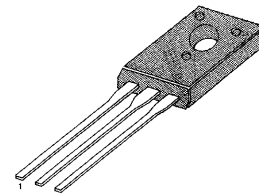


COLLECTOR-EMITTER SUSTAINING VOLTAGE**LOW COLLECTOR-EMITTER SATURATION****SATURATION VOLTAGE****HIGH CURRENT GAIN-BANDWIDTH****PRODUCT-MIN $f_T=65\text{MHz}$ @ $I_C=-100\text{mA}$**

Complement to KSE200

TO-18



1. Emitter 2. Collector 3. Base

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector- Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter- Base Voltage	V_{EBO}	-8	V
Collector Current	I_C	-5	A
Collector Dissipation ($T_C=25^\circ\text{C}$)	P_C	15	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ 150	$^\circ\text{C}$

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = -10\text{mA}$, $I_B = 0$	-25		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -40\text{V}$, $I_E = 0$		-100	nA
		$V_{CB} = -40\text{V}$, $I_E = 0$, $T_J = 125^\circ\text{C}$		-100	μA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = -8\text{V}$, $I_C = 0$		-100	nA
DC Current Gain	h_{FE}	$V_{CE} = -1\text{V}$, $I_C = -500\text{mA}$	70		
		$V_{CE} = -1\text{V}$, $I_C = -2\text{A}$	45	180	
		$V_{CE} = -2\text{V}$, $I_C = -5\text{A}$	10		
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-0.3	V
		$I_C = -2\text{A}$, $I_B = -200\text{mA}$		-0.75	V
		$I_C = -5\text{A}$, $I_B = -1\text{A}$		-1.8	V
Base- Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -5\text{A}$, $I_B = -1\text{A}$		-2.5	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -1\text{V}$, $I_C = -2\text{A}$		-1.6	V
Current Gain- Bandwidth Product	f_T	$V_{CE} = -10\text{V}$, $I_C = -100\text{mA}$, $f = 10\text{MHz}$	65		MHz
Output Capacitance	C_{OB}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 0.1\text{MHz}$		120	pF

