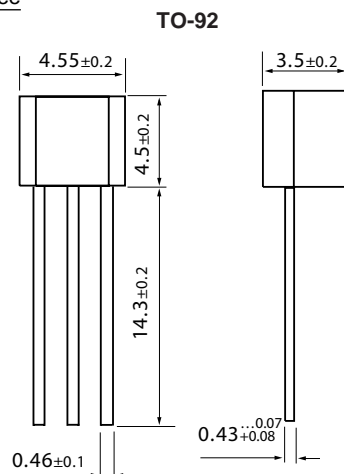


RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

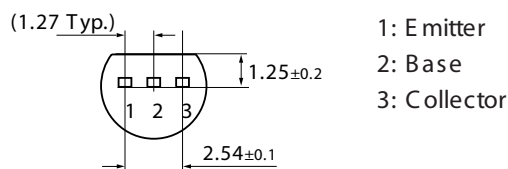
FEATURES

- Complement to KSB564A
- Collector Current : $I_C = 1A$
- Collector Dissipation : $P_C = 800mW$



MAXIMUM RATINGS ($T_A=25$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	1	A
P_C	Collector Power Dissipation	0.8	W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55-150	°C



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=1V, I_C=100mA$	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.1A$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1A, I_B=0.1A$			1.2	V
Output Capacitance	C_{ob}	$V_{CB}=6V, I_E=0, f=1MHz$		16		pF
Transition frequency	f_T	$V_{CE}=6V, I_C=10mA$		130		MHz

CLASSIFICATION OF h_{FE}

Rank	O	Y	G
Range	70-140	120-240	200-400

Characteristics Curve

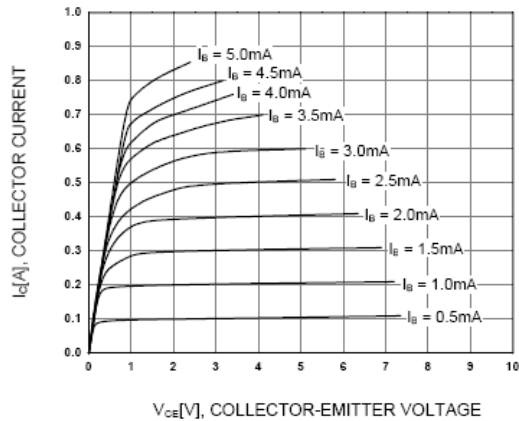


Figure 1. Static Characteristic

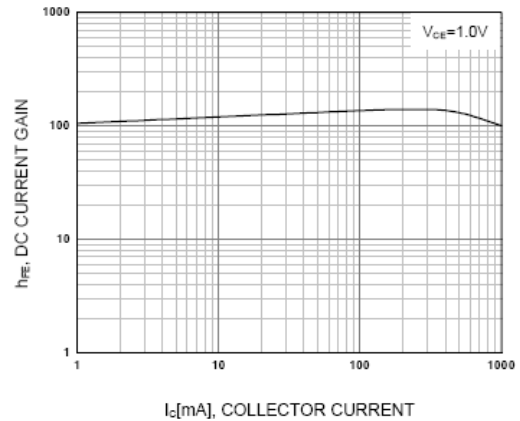
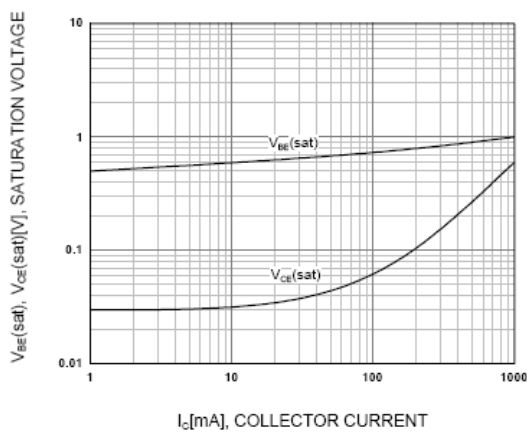


Figure 2. DC current Gain



**Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage**

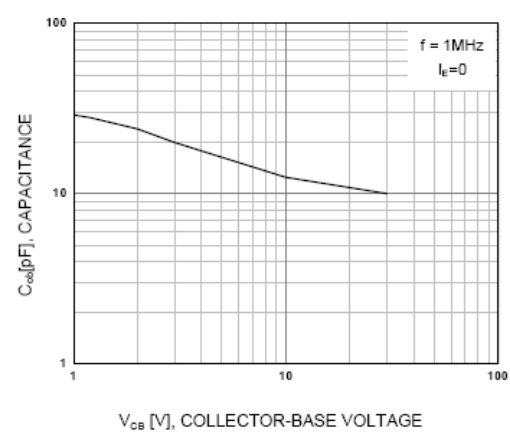


Figure 4. Collector Output Capacitance

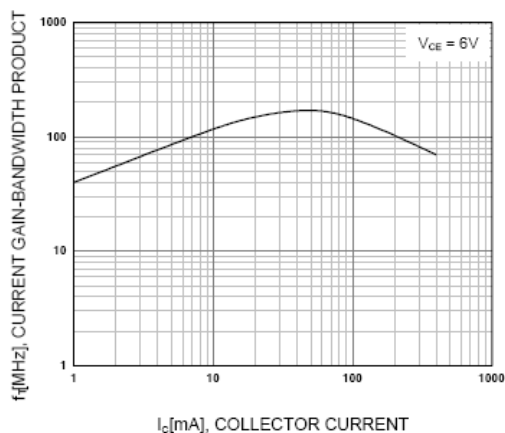


Figure 5. Current Gain Bandwidth Product

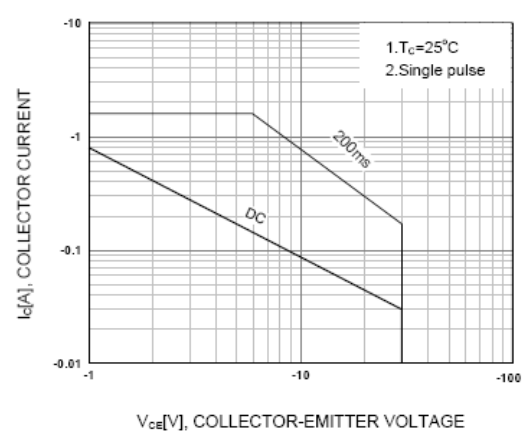


Figure 6. Safe Operating Area