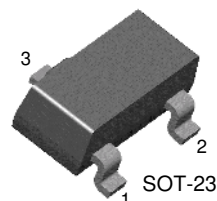


KST63/64

Darlington Transistor



1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-30	V
V_{CES}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-10	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	350	mW
T_{STG}	Storage Temperature	150	$^\circ\text{C}$

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

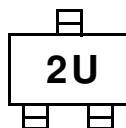
Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CES}	Collector-Emitter Breakdown Voltage	$I_C = -100, V_{BE} = 0$	-30		V
I_{CBO}	Collector Cut-off Current	$V_{CE} = -30V, I_E = 0$		-100	nA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -10V, I_C = 0$		-100	nA
h_{FE}	* DC Current Gain				
	: KST63	$V_{CE} = -5V, I_C = -10mA$	5K		
	: KST64		10K		
	: KST63	$V_{CE} = -5V, I_C = -100mA$	10K		
	: KST64		20K		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -100mA, I_B = -0.1mA$		-1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = -5V, I_C = -100mA$		-2.0	V
f_T	Current Gain Bandwidth Product	$V_{CE} = -5V, I_C = -10mA$ $f = 100MHz$	125		MHz

* Pulse test: $PW \leq 300\mu s$, Duty Cycle $\leq 2\%$

Marking Code

Type	KST63	KST64
Mark	2U	2V

Marking



Typical Characteristics

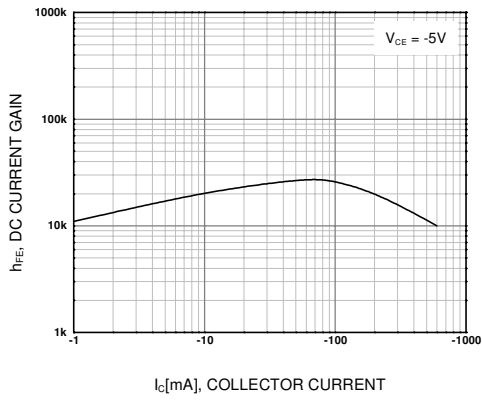


Figure 1. DC current Gain

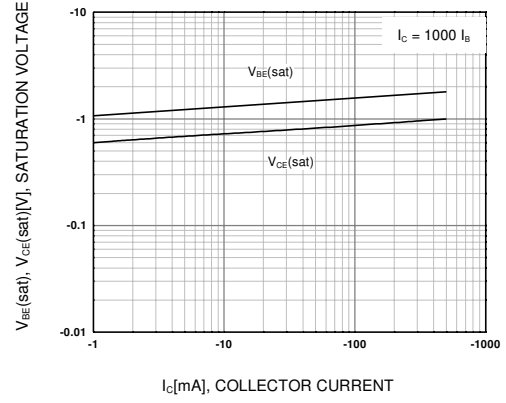


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

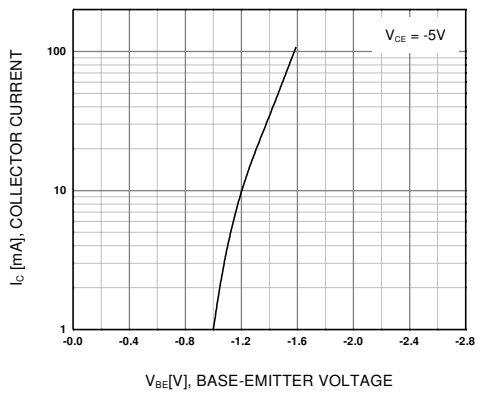


Figure 3. Base-Emitter On Voltage

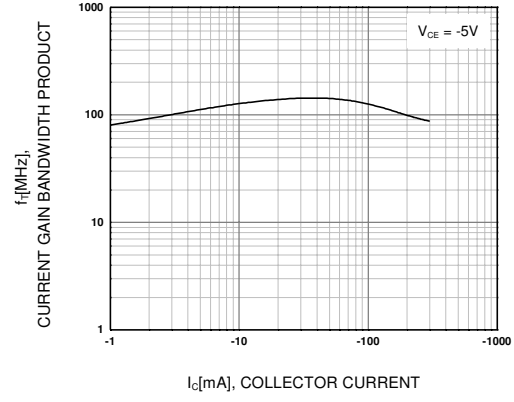
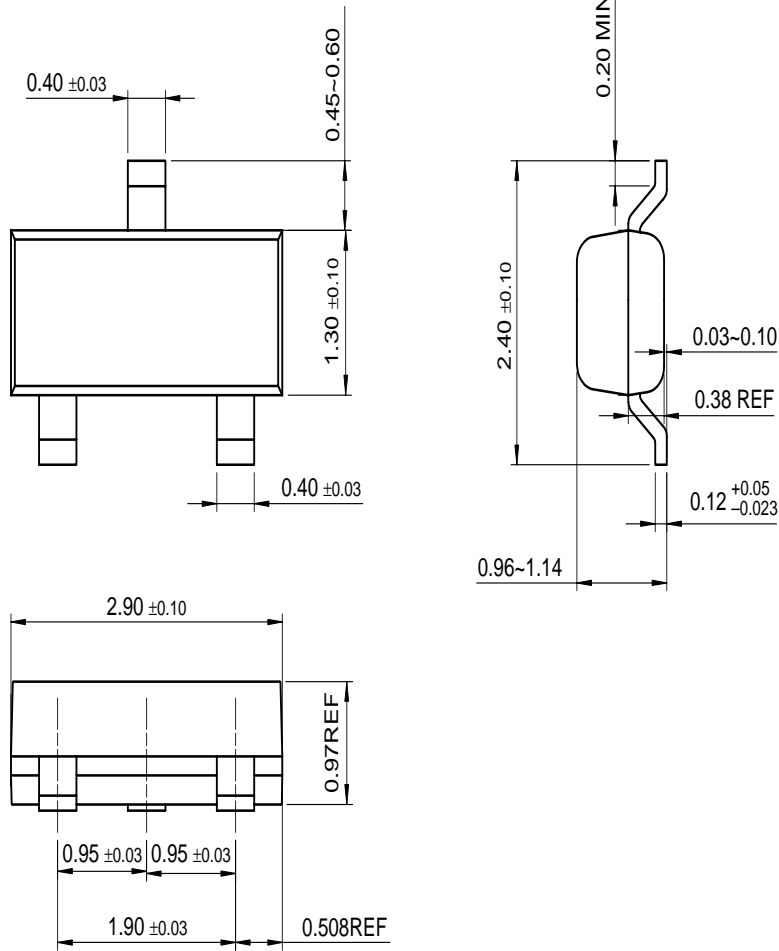


Figure 4. Current Gain Bandwidth Product

Package Dimensions

SOT-23



Dimensions in Millimeters

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Bottomless™	FAST®	LittleFET™	Power247™	SuperSOT™-3
CoolFET™	FAST ^r ™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOL™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E ² CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I ² C™	OCX™	RapidConfigure™	UHC™
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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