

KSA1298**PNP EPITAXIAL SILICON TRANSISTOR**

T-29-15

LOW FREQUENCY AMPLIFIER

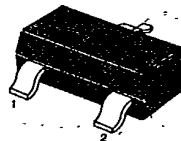
• Complement to KSC3265

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-30	V
Collector-Emitter Voltage	V_{CE0}	-25	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-800	mA
Base Current	I_B	-160	mA
Collector Dissipation	P_C	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~150	$^\circ\text{C}$

• Refer to KSA643 for graphs.

SOT-23



1. Base 2. Emitter 3. Collector

3

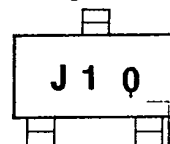
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=-10\text{mA}$, $I_B=0$	-25			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=-1\text{mA}$, $I_C=0$	-5			V
Collector Cutoff Current	I_{CB0}	$V_{CB}=-30\text{V}$, $I_E=0$			-100	nA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=-5\text{V}$, $I_C=0$			-100	nA
DC Current Gain	h_{FE1}	$V_{CE}=-1\text{V}$, $I_C=-100\text{mA}$	100		320	
	h_{FE2}	$V_{CE}=-1\text{V}$, $I_C=-800\text{mA}$	40			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}$, $I_B=-20\text{mA}$			-0.4	V
Base-Emitter (on) Voltage	$V_{BE(on)}$	$V_{CE}=-1\text{V}$, $I_C=-10\text{mA}$	-0.5		-0.8	V
Current Gain-Bandwidth Product	f_T	$V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$		120		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$ $f=1\text{MHz}$		13		pF

 h_{FE} (1) CLASSIFICATION

Classification	O	Y
$h_{FE}(1)$	100-200	160-320

Marking

 h_{FE} grade