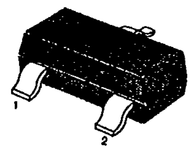
KSC3265 NPN EPITAXIAL SILICON TRANSISTOR

LOW FREQUENCY AMPLIFIER

- **Complement to KSA1298**

SOT-23



1. Base 2. Emitter 3. Collector

ABSOLUTE MAXIMUM RATINGS ($T_a=25°C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	800	mA
Base Current	I_B	160	mA
Collector Dissipation	P_C	200	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55~150	°C

- Refer to KSD261 for graphs

ELECTRICAL CHARACTERISTICS ($T_a=25°C$)

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

h_{FE} (1) CLASSIFICATION

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