

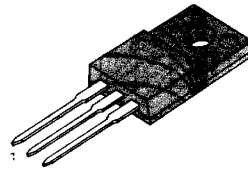
KSB1098**PNP SILICON DARLINGTON TRANSISTOR****LOW FREQUENCY POWER AMPLIFIER****LOW SPEED SWITCHING****INDUSTRIAL USE**

- Complement to KSD1589

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	- 100	V
Collector Emitter Voltage	V_{CEO}	- 100	V
Emitter Base Voltage	V_{EBO}	- 7	V
Collector Current (DC)	I_C	- 5	A
*Collector Current (Pulse)	I_C	- 8	A
Base Current	I_B	- 0.5	A
Collector Dissipation ($T_A=25^{\circ}\text{C}$)	P_C	2	W
Collector Dissipation ($T_C=25^{\circ}\text{C}$)	P_C	20	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	- 55 ~ 150	$^{\circ}\text{C}$

TO-220F



1.Base 2.Collector 3.Emitter

* $PW \leq 300\mu\text{s}$, Duty Cycle $\leq 10\%$ **ELECTRICAL CHARACTERISTICS** ($T_C = 25^{\circ}\text{C}$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = - 100\text{V}$, $I_E = 0$			- 1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = - 5\text{V}$, $I_C = 0$			- 3	mA
* DC Current Gain	h_{FE1}	$V_{CE} = - 2\text{V}$, $I_C = - 3\text{A}$	2000		15K	
	h_{FE2}	$V_{CE} = - 2\text{V}$, $I_C = - 5\text{A}$	500			
* Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = - 3\text{A}$, $I_B = - 3\text{mA}$			- 1.5	V
* Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = - 3\text{A}$, $I_B = - 3\text{mA}$			- 2	V
Turn On Time	t_{ON}	$I_C = - 3\text{A}$, $R_L = 17\Omega$		0.5		μs
Storage Time	t_{STG}	$I_{B1} = - I_{B2} = - 3\text{mA}$		1		μs
Fall Time	t_F	$V_{CC} = - 50\text{V}$		1		μs

* Pulse Test: $PW \leq 350\mu\text{s}$, Duty Cycle $\leq 2\%$ Pulsed **$h_{FE}(1)$ CLASSIFICATION**

Classification	R	O	Y
h_{FE1}	2000 ~ 5000	3000 ~ 7000	5000 ~ 15000

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Rev. B

