

isc Silicon PNP Darlington Power Transistor

KSB601

DESCRIPTION

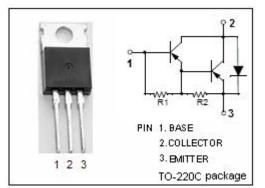
- High DC Current Gain-
- : h_{FE} = 2000(Min)@ I_C= -3A
- Collector-Emitter Sustaining Voltage-
 - : V_{CEO(SUS)} = -100V(Min)
- Low Collector-Emitter Saturation Voltage-
 - : V_{CE(sat)} = -1.5V(Max)@ I_C= -3A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

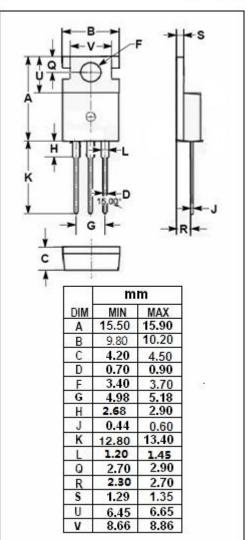
APPLICATIONS

- Designed for use in low-frequency power amplifiers and lowspeed switching applications.
- Ideal for use in direct drive from IC output for magnet drivers such as terminal equipment or cash registers.

ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

SYMBOL	PARAMETER	VALUE		
V _{CBO}	Collector-Base Voltage	-100	V	
V _{CEO}	Collector-Emitter Voltage	-100	V	
V _{EBO}	Emitter-Base Voltage	-7	V	
Ic	Collector Current-Continuous	-5	А	
Ісм	Collector Current-Peak	-8	A	
I _B	Base Current-DC	-0.5	А	
Pc	Collector Power Dissipation T_c =25 °C	30	14/	
	Collector Power Dissipation $T_a=25^{\circ}C$	1.5	W	
Tj	Junction Temperature	150	°C	
T _{stg}	Storage Temperature Range	-55~150	°C	





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ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A ,I _B = -3mA			-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I _C = -3A ,I _B = -3mA			-2.0	V
Ісво	Collector Cutoff Current	V _{CB} = -100V, I _E = 0			-10	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-3	mA
h _{FE-1}	DC Current Gain	Ic= -3A ; Vc= -2V	2000		15000	
h _{FE-2}	DC Current Gain	I _C = -5A ; V _{CE} = -2V	500			

Switching times

ton	Turn-on Time		0.5	μs
t _{stg}	Storage Time	R _L = 17 Ω , V _{CC} ≈ -50V I _C = -3A; I _{B1} = -I _{B2} = -3mA	1.0	μs
t _f	Fall Time		1.0	μ S

• h_{FE-1} Classifications

R	0	Y
2000-5000	3000-7000	5000-15000

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