

DESCRIPTION

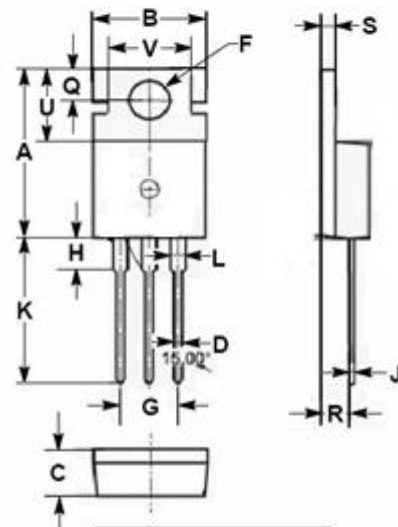
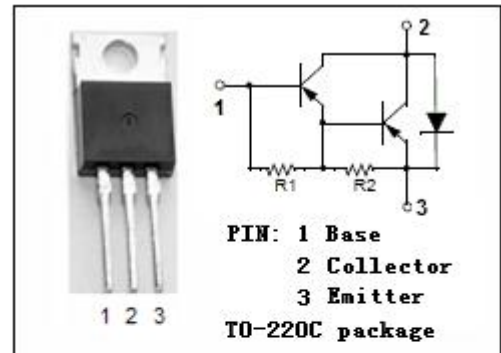
- High DC Current Gain-
: $h_{FE} = 2000(\text{Min}) @ I_C = -3A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(\text{SUS})} = -100V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(\text{sat})} = -1.5V(\text{Max}) @ I_C = -3A$

APPLICATIONS

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

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
I_B	Base Current-DC	-0.5	A
P_C	Collector Power Dissipation $T_C = 25^\circ\text{C}$	30	W
	Collector Power Dissipation $T_a = 25^\circ\text{C}$	1.5	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.10	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

SPTECH Silicon PNP Darlington Power Transistor**2SB601****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	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
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V, I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-3	mA
h _{FE-1}	DC Current Gain	I _C = -3A ; V _{CE} = -2V	2000		15000	
h _{FE-2}	DC Current Gain	I _C = -5A ; V _{CE} = -2V	500			

Switching times

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

◆ **h_{FE-1} Classifications**

M	L	K
2000-5000	3000-7000	5000-15000