

SPTECH Silicon PNP Power Transistor

2SA1567

DESCRIPTION

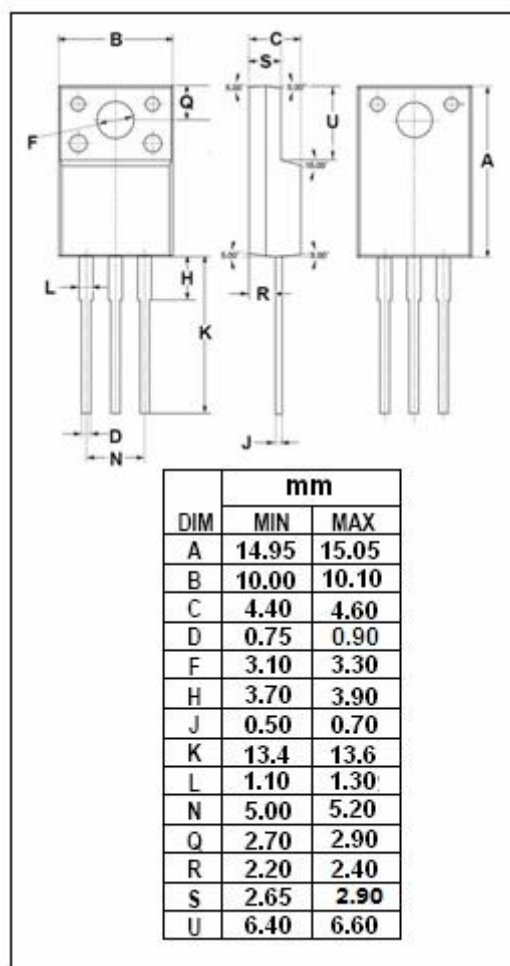
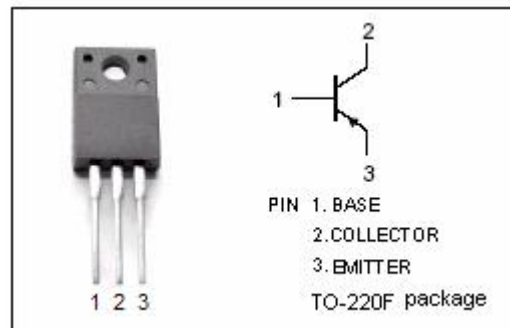
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -50V(\text{Min})$
- DC Current Gain-
: $h_{FE} = 50(\text{Min})@ (V_{CE} = -1V, I_C = -6A)$
- Low Saturation Voltage-
: $V_{CE(sat)} = -0.35V(\text{Max})@ (I_C = -6A, I_B = -0.6A)$

APPLICATIONS

- Designed for DC motor driver, chopper regulator and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-12	A
I_B	Base Current-Continuous	-3	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	35	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -25mA ; I _B = 0	-50			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -6A; I _B = -0.3A			-0.35	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -50V ; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V; I _C = 0			-100	μ A
h _{FE1}	DC Current Gain	I _C = -6A ; V _{CE} = -1V	50			
C _{OB}	Output Capacitance	I _E =0 ; V _{CB} = -10V; f _{test} = 1.0MHz		330		pF
f _T	Current-Gain—Bandwidth Product	I _E = 0.5A ; V _{CE} = -12V		40		MHz

Switching Times

t _{on}	Turn-on Time	I _C = -6A , R _L = 4 Ω , I _{B1} = -I _{B2} = -0.12A, V _{CC} = -24V		0.4		μ s
t _{stg}	Storage Time			0.4		μ s
t _f	Fall Time			0.2		μ s