

SPTECH Silicon PNP Power Transistor

2SA1452

DESCRIPTION

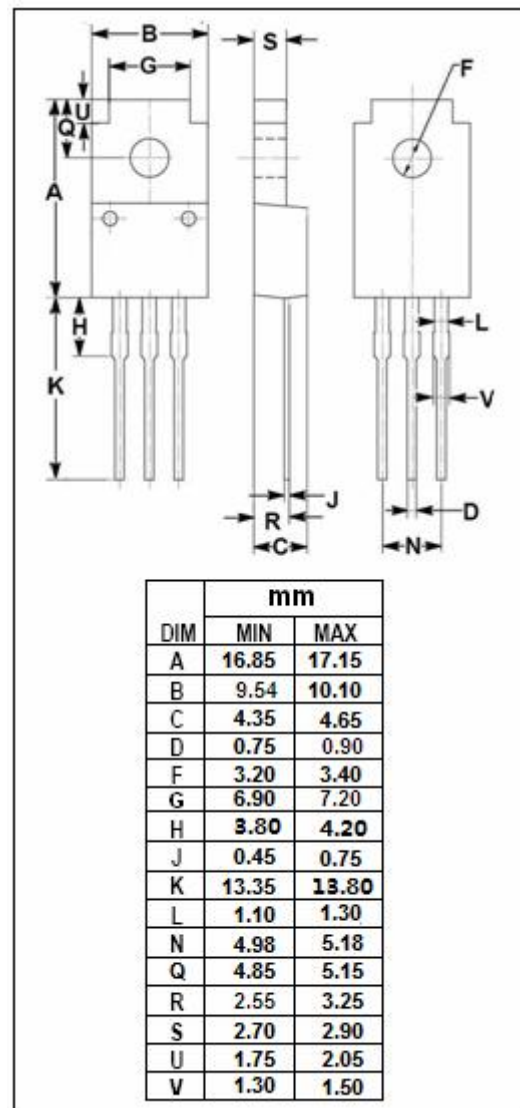
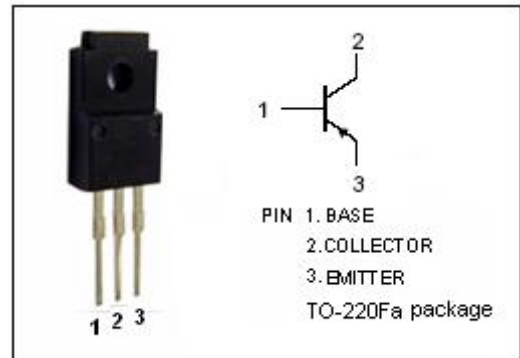
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -0.4V(Max) @ I_C = -6A$
- Good Linearity of h_{FE}
- High Switching Speed
- Complement to Type 2SC3710

APPLICATIONS

- Designed for high current switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emmitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-12	A
I_B	Base Current-Continuous	-2	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	30	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -50mA ; I _B = 0	-80			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -6A; I _B = -0.3A			-0.4	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -6A; I _B = -0.3A			-1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -80V ; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V ; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _C = -1A ; V _{CE} = -1V	70		240	
h _{FE-2}	DC Current Gain	I _C = -6A ; V _{CE} = -1V	40			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f _{test} = 1MHz		400		pF
f _T	Current-Gain—Bandwidth Product	I _C = -1A; V _{CE} = -5V		50		MHz

Switching Times

t _{on}	Turn-on Time	I _C = -6A, I _{B1} = -I _{B2} = -0.3A, V _{CC} = -30V, R _L = 5 Ω		0.3		μ s
t _{stg}	Storage Time			1.0		μ s
t _f	Fall Time			0.5		μ s

◆ **h_{FE-1} Classifications**

O	Y
70-140	120-240