

SPTECH Silicon NPN Power Transistor

2SC4064

DESCRIPTION

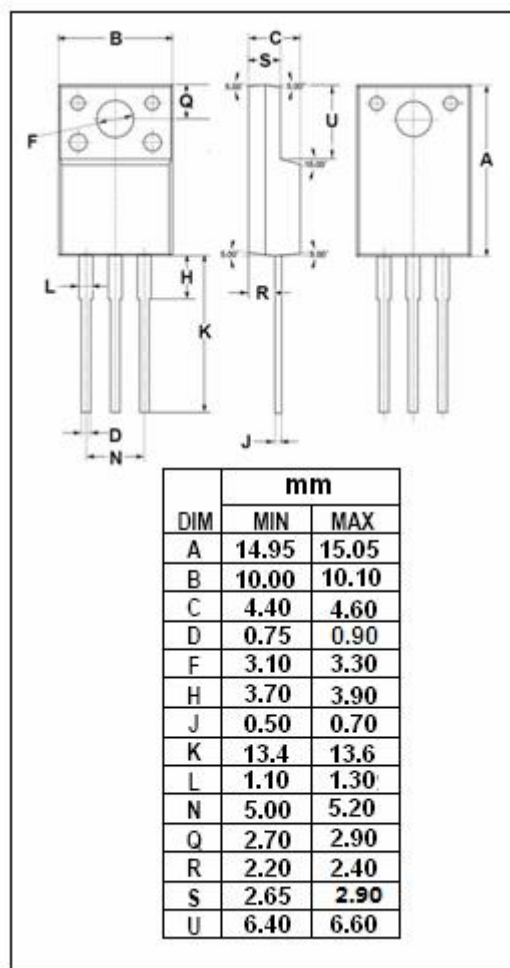
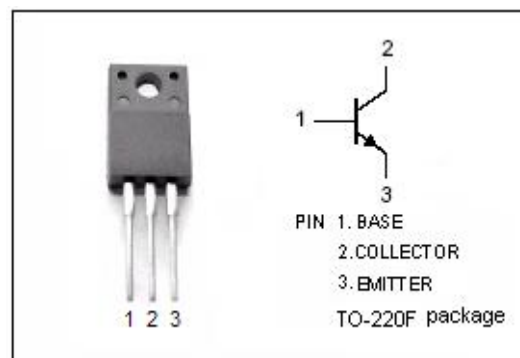
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.35V(\text{Max}) @ I_C = 6A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 50V(\text{Min})$
- Complement to Type 2SA1567

APPLICATIONS

- Designed for use in DC motor driver 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 Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 25\text{mA}$; $I_B = 0$	50			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 6\text{A}$; $I_B = 0.3\text{A}$			0.35	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=50\text{V}$; $I_E = 0$			100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 6\text{V}$; $I_C = 0$			10	μA
h_{FE}	DC Current Gain	$I_C = 6\text{A}$; $V_{CE} = 1\text{V}$	50			
f_T	Current-Gain—Bandwidth Product	$I_E = -0.5\text{A}$; $V_{CE} = 12\text{V}$		40		MHz
C_{OB}	Output Capacitance	$I_E = 0$; $V_{CB} = 12\text{V}$; $f_{test} = 1.0\text{MHz}$		180		pF

Switching times

t_{on}	Turn-on Time	$I_C = 6\text{A}$; $I_{B1} = -I_{B2} = 0.12\text{A}$ $R_L = 4\ \Omega$; $V_{CC} = 24\text{V}$		0.6		μs
t_{stg}	Storage Time			1.4		μs
t_f	Fall Time			0.4		μs