

isc Silicon NPN Power Transistor

2SC4460

DESCRIPTION

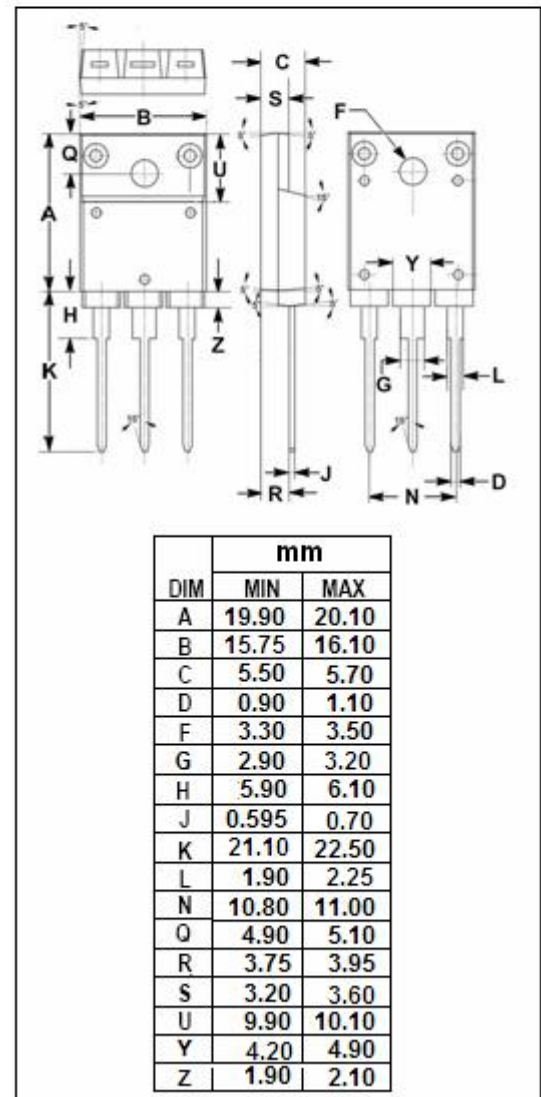
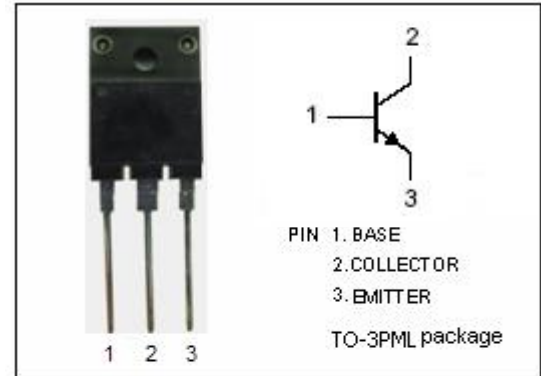
- High Breakdown Voltage-
: $V_{(BR)CEO} = 500V(\text{Min})$
- Fast Switching speed
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for switching regulator applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	800	V
V_{CEO}	Collector-Emitter Voltage	500	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	15	A
I_{CP}	Collector Current-Pulse	25	A
I_B	Base Current-Continuous	4	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	55	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	3	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC4460****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	$I_C = 5\text{mA}$; $R_{BE} = \infty$	500			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = 1\text{mA}$; $I_E = 0$	800			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = 1\text{mA}$; $I_C = 0$	7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 6\text{A}$; $I_B = 1.2\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 6\text{A}$; $I_B = 1.2\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = 500\text{V}$; $I_E = 0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5\text{V}$; $I_C = 0$			10	μA
h_{FE-1}	DC Current Gain	$I_C = 1.2\text{A}$; $V_{CE} = 5\text{V}$	15		50	
h_{FE-2}	DC Current Gain	$I_C = 6\text{A}$; $V_{CE} = 5\text{V}$	8			

◆ h_{FE-1} Classifications

L	M	N
15-30	20-40	30-50

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