

isc Silicon NPN Power Transistor

2SC4544

DESCRIPTION

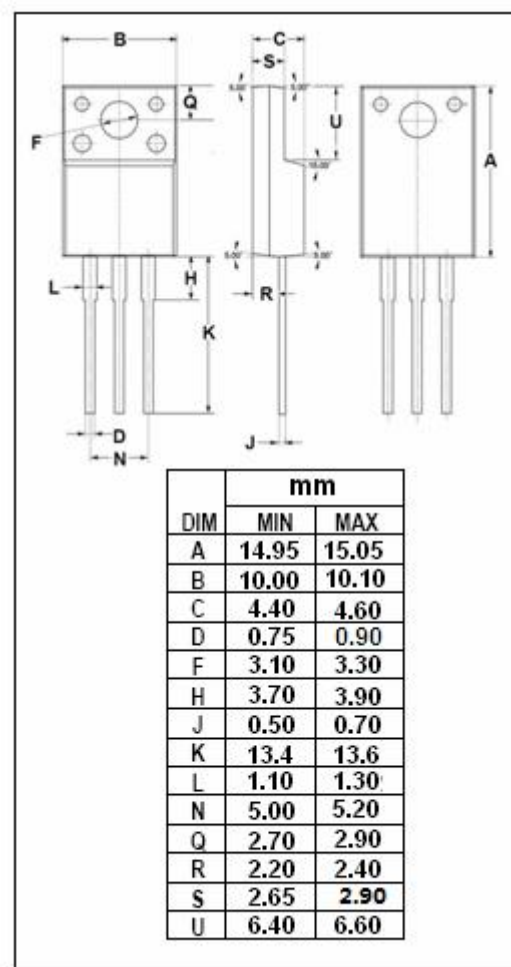
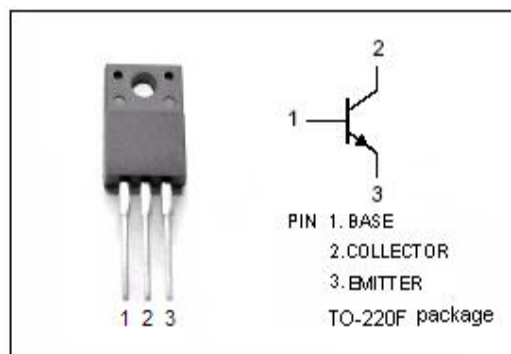
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 300V(\text{Min})$
- Small Collector Output Capacitance
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High voltage switching and amplifier applications.
- Color TV horizontal driver applications.
- Color TV chroma output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	0.1	A
I_B	Base Current-Continuous	50	mA
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	8	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC4544****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 = 1mA ; I _B = 0	300			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 10mA; I _B = 1mA			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10mA; I _B = 1mA			1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 240V ; I _E = 0			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			1.0	μ A
h _{FE-1}	DC Current Gain	I _C = 4mA ; V _{CE} = 10V	20			
h _{FE-2}	DC Current Gain	I _C = 20mA ; V _{CE} = 10V	30		200	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 20V; f= 1MHz		3.0		pF
f _T	Current-Gain—Bandwidth Product	I _C = 20mA ; V _{CE} = 10V	50	70		MHz

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.