

isc Silicon NPN Power Transistor

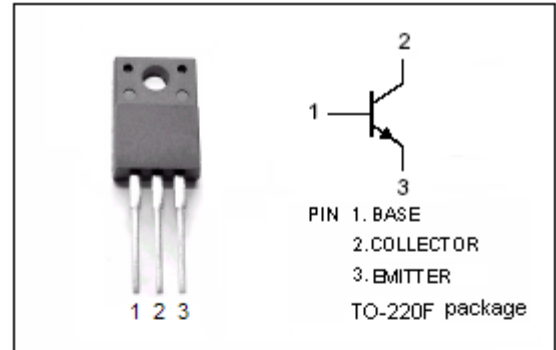
2SC4544

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 300V(\text{Min})$
- Small Collector Output Capacitance

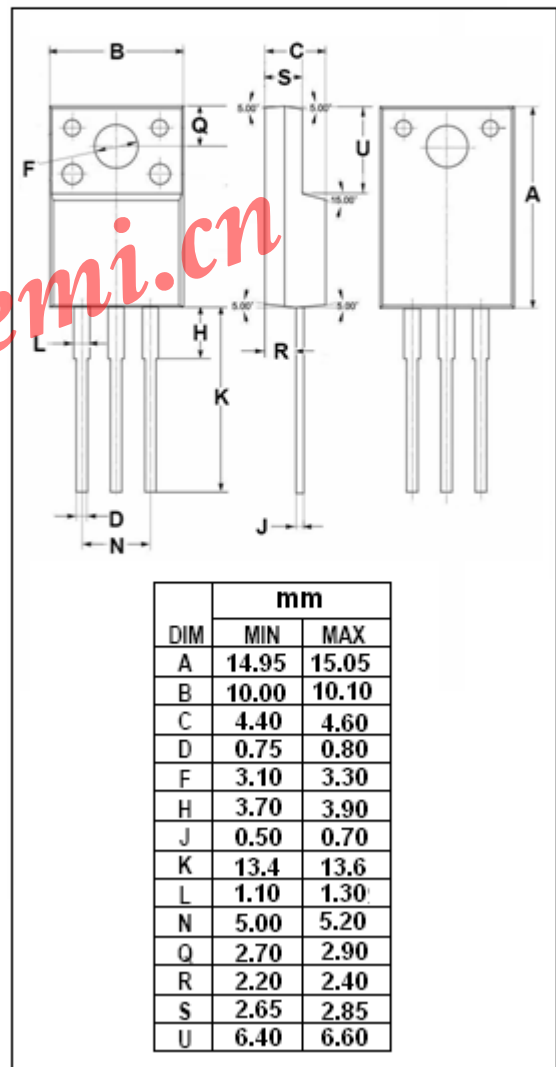
APPLICATIONS

- 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