

isc Silicon NPN Power Transistor

2SD1404

DESCRIPTION

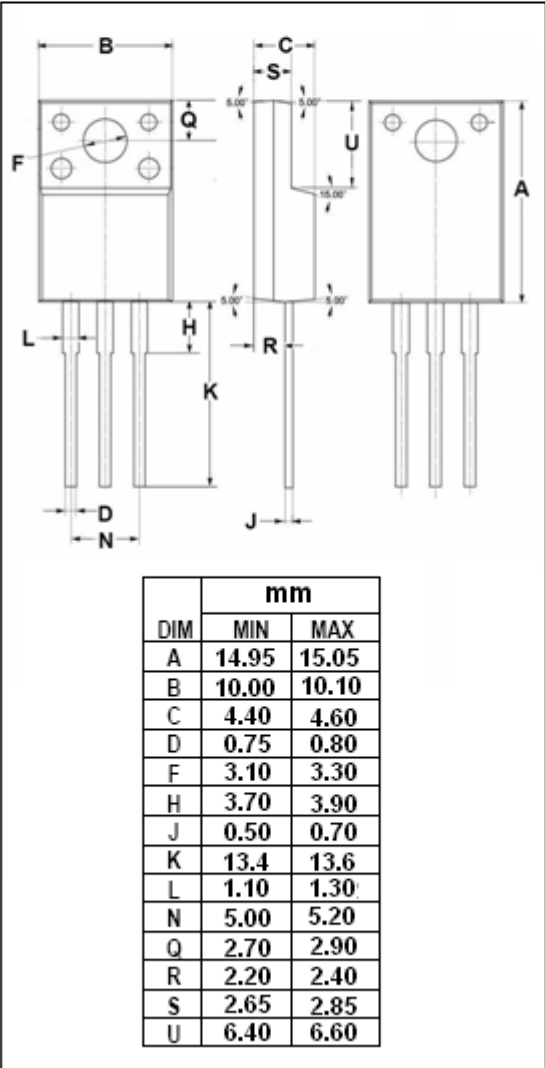
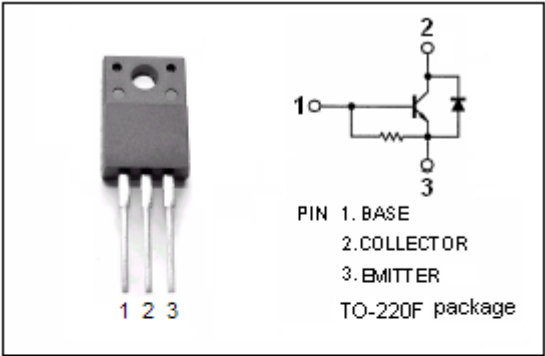
- High Collector Current Capability
- High Collector Power Dissipation Capability
- Built-in Damper Diode

APPLICATIONS

- B/W TV horizontal deflection output applications.
- High voltage switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	300	V
V _{CEO}	Collector-Emitter Voltage	150	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current-Continuous	7	A
I _{CM}	Collector Current-Peak	15	A
I _B	Base Current-Continuous	2	A
P _C	Collector Power Dissipation T _a =25℃	2	W
	Collector Power Dissipation T _C =25℃	25	
T _j	Junction Temperature	150	℃
T _{stg}	Storage Ttemperature Range	-55~150	℃



isc Silicon NPN Power Transistor**2SD1404****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 100mA; L= 50mH	150			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	300			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 0.1A; I _C = 0	6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CE} = 250V; V _{BE} = 0			1	mA
h _{FE}	DC Current Gain	I _C = 5A ; V _{CE} = 1.5V	10			
f _T	Current-Gain—Bandwidth Product	I _C = 0.2A; V _{CE} = 10V		18		MHz
V _{ECF}	C-E Diode Forward Voltage	I _F = 6A			1.8	V
t _f	Fall Time	I _{CP} = 5A; I _{B1(end)} = 0.5A			1.0	μ s