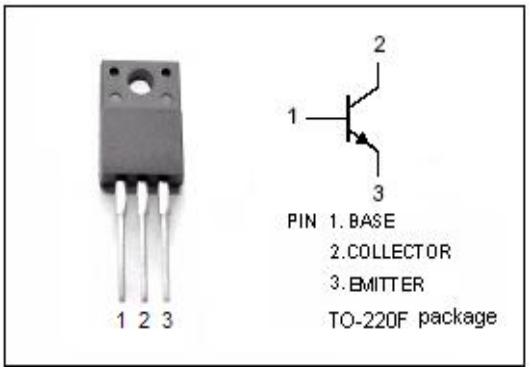
isc Silicon NPN Power Transistors 2SC6144

DESCRIPTION

- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$ = 0.36V(Max.)@I_C= 6A
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)\ CEO}$= 50V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

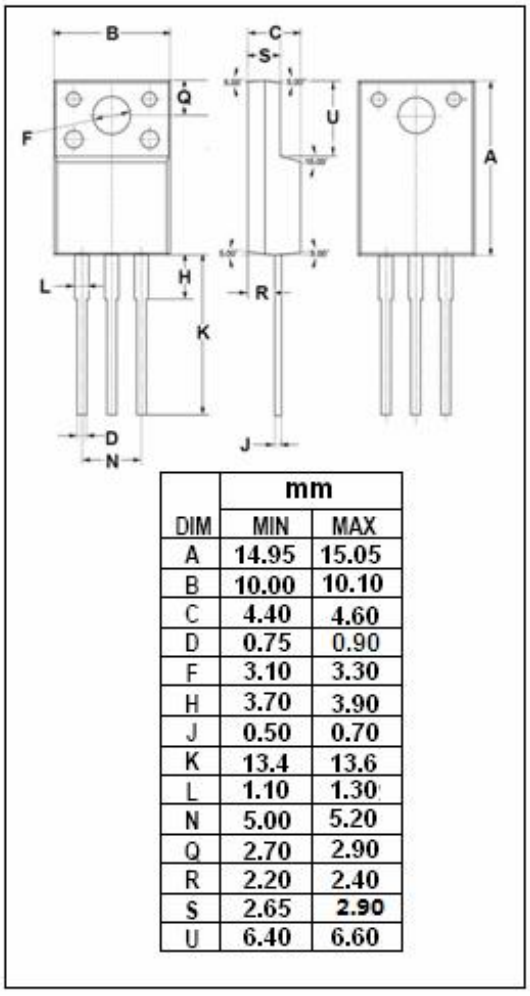


APPLICATIONS

- Relay drivers,lamp drivers,motor drivers

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Pulse	13	A
I_B	Base Current	2	A
P_C	Collector Power Dissipation T_C=25℃	25	W
T_j	Max.Junction Temperature	150	℃
T_{stg}	Storage Ttemperature Range	-55~150	℃



DIM	mm MIN	MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	5	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA; I_B= 0	50		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 300mA		0.36	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 300mA		1.2	V
I_{CBO}	Collector Cutoff Current	V_{CE}= 40V; V_{EB}= 0		10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0		10	μA
h_{FE}	DC Current Gain	I_C=0.27A ; V_{CE}= 2V	200	560	