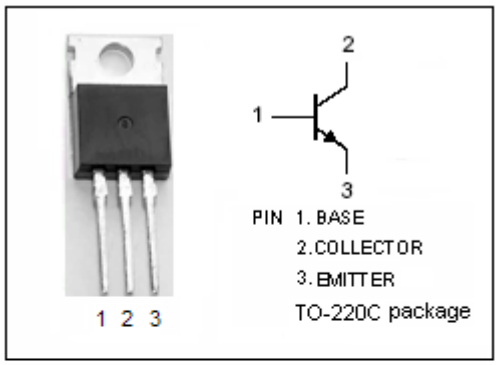
isc Silicon NPN Power Transistor 2SD401

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 150V (Min)
- Collector Power Dissipation-
  : P_C= 30W(Max)@ T_C= 25℃
- Complement to Type 2SB546



APPLICATIONS

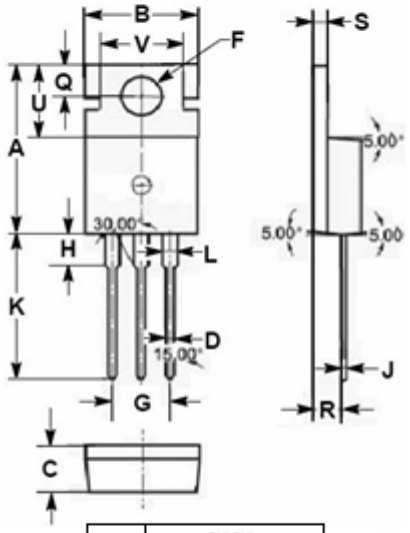
- Designed for use in line-operated color TV vertical deflection of complementary symmetry circuit.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Peak	3	A
I_{BM}	Base Current-Peak	1.5	A
P_C	Total Power Dissipation @ T_C=25℃	30	W
T_J	Junction Temperature	150	
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	78	℃/W
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	4.16	℃/W



DIM	mm MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

isc Silicon NPN Power Transistor 2SD401

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA ; I_B= 0	150			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 0.5A; I_B= 50mA			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 150V; I_E= 0			50	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			50	μA
h_{FE}	DC Current Gain	I_C= 0.4A; V_{CE}= 10V	40			
f_T	Current-Gain—Bandwidth Product	I_C= 0.4A; V_{CE}= 10V		7		MHz
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 1MHz		45		pF