Silicon NPN Power Transistor 2SD1894

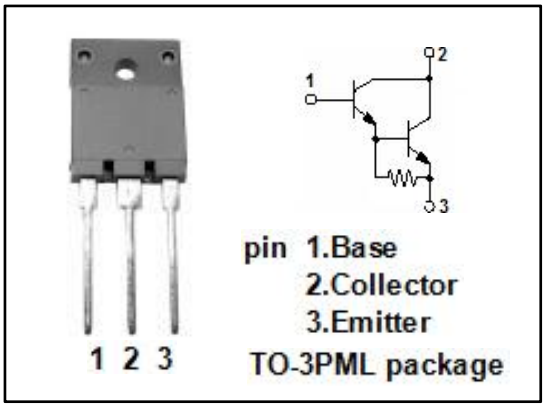
DESCRIPTION

· Collector-Emitter Breakdown Voltage

-$V_{(BR)CEO}$= 140V(Min)

· Collector-Emitter Saturation Voltage

-$V_{CE(sat)}$:2.5V(Max) @I_C= 6A



APPLICATIONS

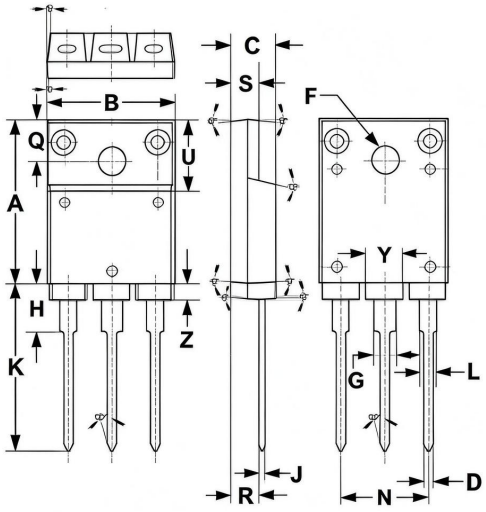
· Horizontal deflection output for color TV

ABSOLUTE MAXIMUM RATINGS(T_C=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	140	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	7	A
I_{CP}	Collector Current-Pulse	12	A
P_C	Total Power Dissipation	70	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.79	℃/W



DIM	mm MIN	MAX
A	19.90	20.10
B	15.75	16.10
C	5.50	5.70
D	0.90	1.10
F	3.30	3.50
G	2.90	3.20
H	5.90	6.10
J	0.595	0.70
K	21.10	22.50
L	1.90	2.25
N	10.80	11.00
Q	4.90	5.10
R	3.75	3.95
S	3.20	3.60
U	9.90	10.10
Y	4.20	4.90
Z	1.90	2.10

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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	140	--	--	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 160V,I_E=0	--	--	0.1	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 140V; I_B= 0	--	--	0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}=5V,I_C=0	--	--	0.1	mA
h_{FE}	DC Current Gain	I_C= 1A, V_{CE}= 5V	2000	--	--	--
		I_C= 6A, V_{CE}= 5V	5000	--	30000	--
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 6A, I_B= 6mA	--	--	2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 6A, I_B= 6mA	--	--	3.0	V

HFE CLASSIFICATION

Q	S	P
5000-15000	7000-21000	8000-30000

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