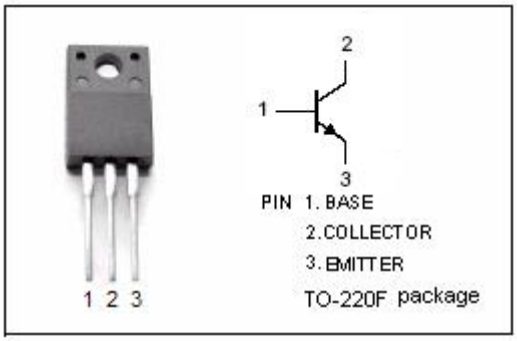
isc Silicon NPN Power Transistor — 2SD2689

DESCRIPTION

- High speed.
- High breakdown voltage(VCBO=1500V).
- High reliability(Adoption of HVP process).
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

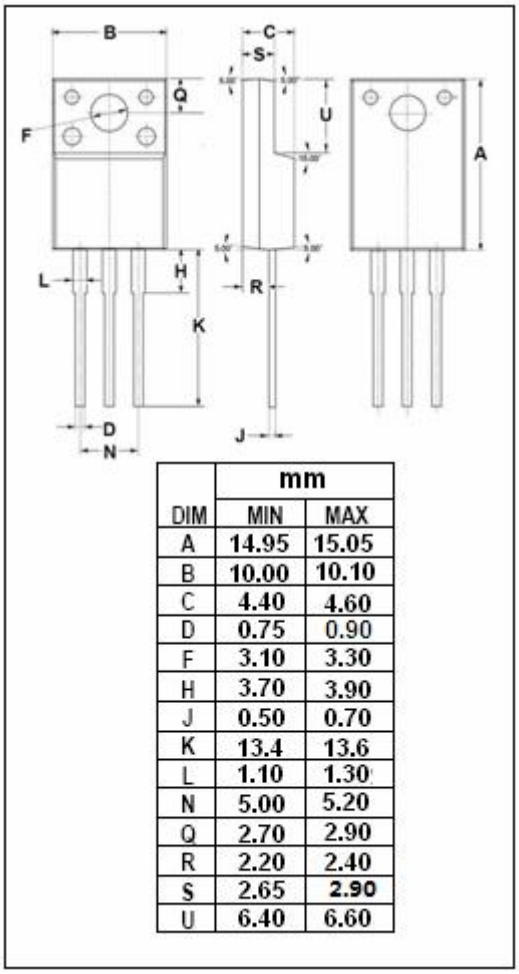


APPLICATIONS

- Designed for Color TV Horizontal Deflection Output Applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Pulse	25	A
I_B	Base Current-Continuous	3.5	A
P_T	Total Power Dissipation @T_C=25℃	35	W
	Total Power Dissipation @T_a=25℃	2.0	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-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

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA ; I_B= 0	700			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 7.2A; I_B= 1.44A			3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 7.2A; I_B= 1.44A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 800V ; I_E= 0			10	μA
I_{CES}	Collector Cutoff Current	V_{CE}=1500V ; R_{BE}= 0			1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1	mA
h_{FE-1}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	15			
h_{FE-2}	DC Current Gain	I_C= 8A ; V_{CE}= 5V	5		8	
Switching times						
t_f	Fall Time	I_C= 5A ,R_L= 12.5Ω , I_{B1}=1A, I_{B2}= 2A,			0.3	μs

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