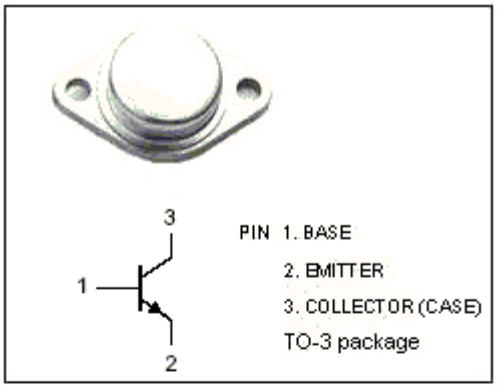
isc Silicon NPN Power Transistor 2SC3720

DESCRIPTION

- High Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 800V (Min)
- High Switching Speed
- Wide Area of Safe Operation

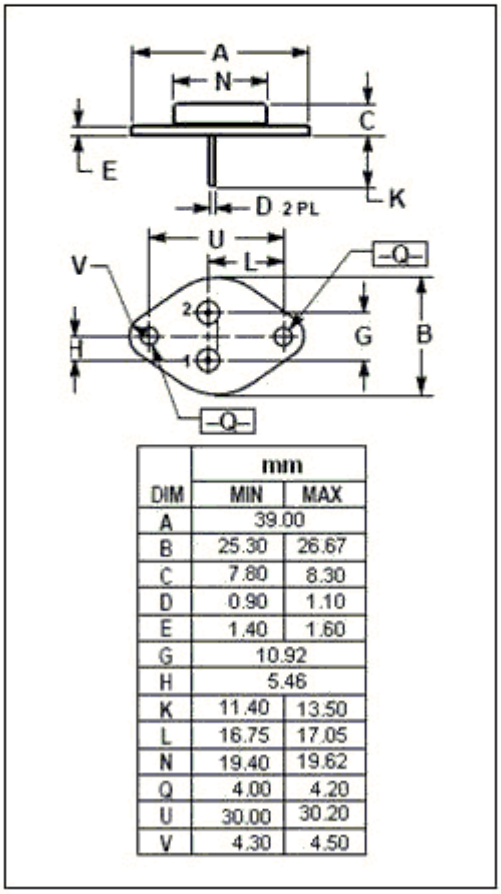


APPLICATIONS

- Designed for high speed switching and horizontal deflection output applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	1200	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation @T_C=25℃	200	W
T_j	Junction Temperature	175	℃
T_{stg}	Storage Temperature Range	-65~175	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.30
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.40	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

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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	800			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 0.8A			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4A; I_B= 0.8A			2.0	V
h_{FE}	DC Current Gain	I_C= 4A; V_{CE}= 5V	6		20	
I_{CBO}	Collector Cutoff Current	V_{CB}= 1000V; I_E= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			0.1	mA

Switching Times

t_{on}	Turn-On Time	I_C= 4A; I_{B1}= 0.8A; I_{B2}= -1.6A; V_{CC}= 250V			1.0	μs
t_{stg}	Storage Time				3.5	μs
t_f	Fall Time				0.3	μs