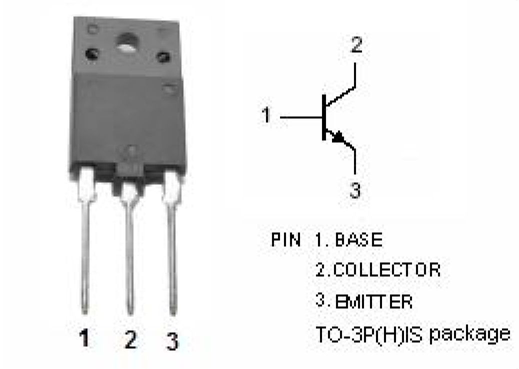
isc Silicon NPN Power Transistor — 2SC5552



DESCRIPTION

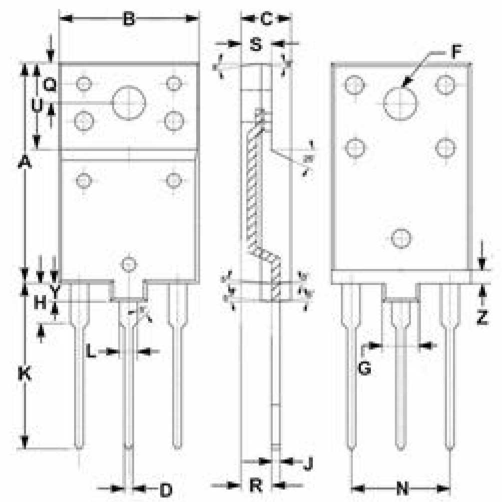
- High Breakdown Voltage
- High Switching Speed
- Low Saturation Voltage
- Wide area of safe operation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Character display horizontal deflection output

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1700	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current- Continuous	16	A
I_{CM}	Collector Current- Continuous	30	A
I_B	Base Current- Continuous	8	A
P_C	Collector Power Dissipation @ T_C=25℃	65	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	24.10	24.70
B	15.20	15.80
C	5.20	5.80
D	0.65	1.05
F	3.30	3.90
G	3.90	4.10
H	4.30	4.70
J	0.80	1.00
K	18.30	18.70
L	1.90	2.40
N	10.70	11.10
Q	4.40	4.60
R	3.30	3.70
S	3.20	3.40
U	9.50	9.70
Y	1.90	2.10
Z	1.40	1.60

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8A; I_B= 2A			3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 8A; I_B=2A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 1500V; I_E= 0			1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			50	uA
h_{FE}	DC Current Gain	I_C= 8A; V_{CE}= 5V	6		12	
f_T	Current-Gain—Bandwidth Product	I_E= 0.1A ; V_{CE}= 10V		3		MHz

Switching times

t_{stg}	Storage Time	I_C= 8A , I_{B1}=2A; I_{B2}= -4A;			3.0	μ s
t_f	Fall Time				0.2	μ s

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