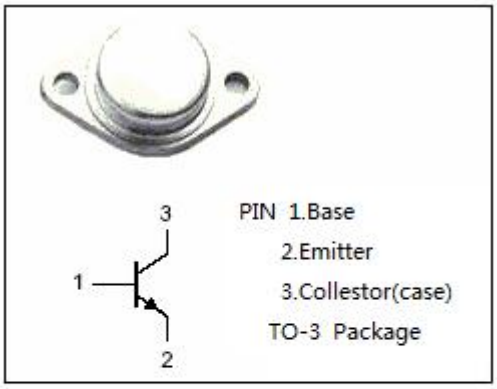
isc Silicon NPN Power Transistor 2SD529

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 320V(Min)
- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$ = 1.5V(Max.) @ I_C= 2.5A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

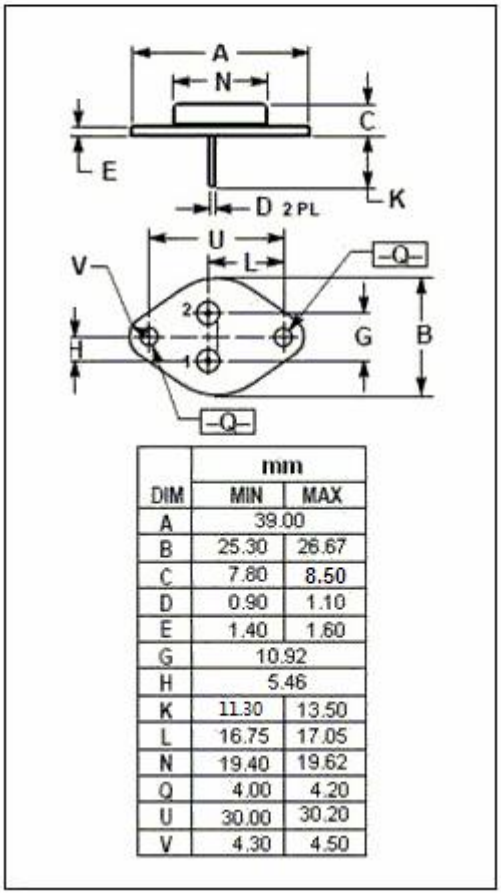


APPLICATIONS

- Designed for use in operating in color TV receivers chopper supplies.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	850	V
V_{CEO}	Collector-Emitter Voltage	320	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current-Continuous	3	A
P_C	Collector Power Dissipation @ T_C=25℃	85	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	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
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 30mA; I_B= 0	320			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 2.5A; I_B= 0.5A			1.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 1.25A			3.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= 2.5A; I_B= 0.5A			1.4	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= 4A; I_B= 1.25A			1.6	V
I_{CES}	Collector Cutoff Current	V_{CE}= 850V; V_{BE}= 0			0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 10V; I_C= 0			0.1	mA
h_{FE}	DC Current Gain	I_C= 1A; V_{CE}= 5V	15	25	40	
f_T	Current-Gain—Bandwidth Product	I_C= 0.2A; V_{CE}= 10V, f= 1.0MHz	4			MHz
Switching Times						
t_{on}	Turn-On Time	I_C= 2.5A; I_{B1}= 0.5A; I_{B2}= -1A; V_{CC}= 250V			0.5	μs
t_{stg}	Storage Time				5.0	μs
t_f	Fall Time				0.5	μs

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