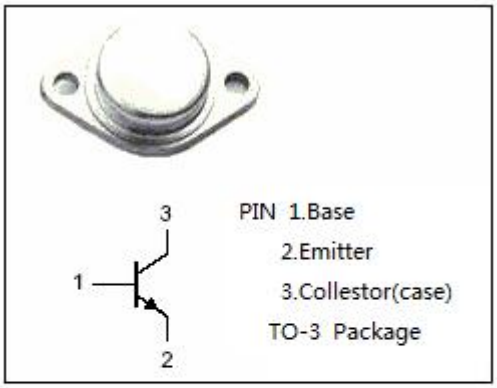
isc Silicon NPN Power Transistors BUY69A BUY69B BUY69C

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  :$V_{CEO(SUS)}$ = 400V(Min)- BUY69A ;
  325V(Min)- BUY69B;
  200V(Min)- BUY69C
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

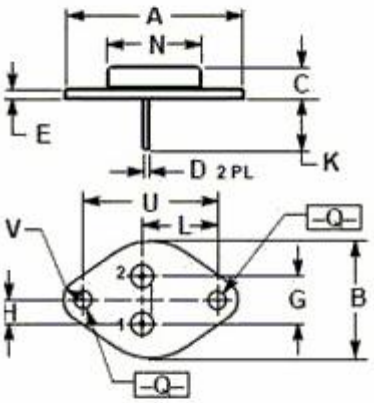


APPLICATIONS

- Designed for horizontal deflection output stage of CTV receivers and high voltalge, fast switching and industrial application.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CES}	Collector-Emitter Voltage(V_{BE}= 0)	BUY69A	1000	V
		BUY69B	800	
		BUY69C	500	
V_{CEO}	Collector-Emitter Voltage	BUY69A	400	V
		BUY69B	325	
		BUY69C	200	
V_{EBO}	Emitter-Base Voltage		8	V
I_C	Collector Current-Continuous		10	A
I_{CM}	Collector Current-peak		15	A
I_B	Base Current-Continuous		3.0	A
P_C	Collector Power Dissipation @T_C=25℃		100	W
T_j	Junction Temperature		200	℃
T_{stg}	Storage Temperature Range		-65~200	℃



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

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.75	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	BUY69A	I_C= 50mA ; I_B= 0	400		V
		BUY69B		325		
		BUY69C		200		
V_{CBO}	Collector-Base Voltage	BUY69A	I_C= 1mA; I_E= 0	1000		V
		BUY69B		800		
		BUY69C		500		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		I_C= 8A ;I_B= 2.5A		3.3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage		I_C= 8A ;I_B= 2.5A		2.2	V
I_{CBO}	Collector Cutoff Current		V_{CB}=V_{CBO}; I_E= 0		1.0	mA
I_{EBO}	Emitter Cutoff Current		V_{EB}= 8V; I_C= 0		1.0	mA
h_{FE}	DC Current Gain		I_C= 2.5A ; V_{CE}= 10V	15		
f_T	Current-Gain—Bandwidth Product		I_C= 0.5A ; V_{CE}= 10V;f_{test}= 1MHz	10		MHz
Switching Times						
t_r	Rise Time		I_C=5A ;I_{B1}=-I_{B2}=1A; V_{CC}=250V		0.3	μs
t_s	Storage Time				1.8	μs
t_f	Fall Time				1.0	μs

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