Silicon NPN Power Transistors BUY69A BUY69B BUY69C

DESCRIPTION

・With TO-3 package
・High voltage capability

APPLICATIONS

・For horizontal deflection output stage of CTV receivers and high voltalge, fast switching and industrial applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

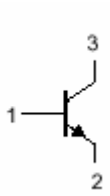

Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	BUY69A	Open emitter	1000	V
		BUY69B		800	
		BUY69C		500	
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	BUY69A	Open base	400	V
		BUY69B		325	
		BUY69C		200	
V_{EBO}	Emitter-base voltage		Open collector	8	V
I_C	Collector current			10	A
I_{CM}	Collector current-peak			15	A
I_B	Base current			3.0	A
P_D	Total power dissipation		T_C=25℃	100	W
T_j	Junction temperature			200	℃
T_{stg}	Storage temperature			-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance from junction to case	1.75	℃/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	BUY69A	I_C=100mA ; 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_{CEsat}	Collector-emitter saturation voltage		I_C=8A ;I_B=2.5A			3.3	V
V_{BEsat}	Base-emitter saturation voltage		I_C=8A ;I_B=2.5A			2.2	V
I_{CES}	Collector cut-off current		V_{CE}=rated V_{CES}; V_{BE}=0			1.0	mA
I_{EBO}	Emitter cut-off 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	Transition frequency		I_C=0.5A ; V_{CE}=10V;f=1MHz	10			MHz
Switching times							
t_r	Rise time		I_C=5A ;I_{B1}=-I_{B2}=1.0A; V_{CC}=250V			0.3	μs
t_s	Storage time					1.8	μs
t_f	Fall time					1.0	μs

PACKAGE OUTLINE

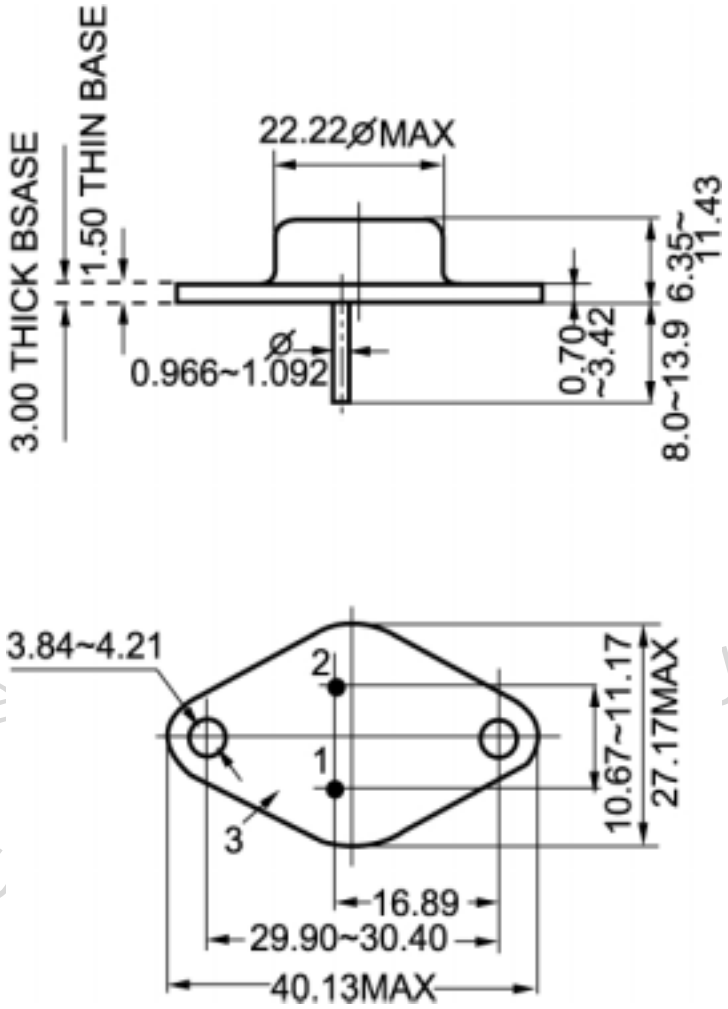

Fig.2 Outline dimensions