DESCRIPTION

- With TO-3 package
- DARLINGTON
- Complement to type BDX64C

APPLICATIONS

- Designed for power amplification and switching applications.

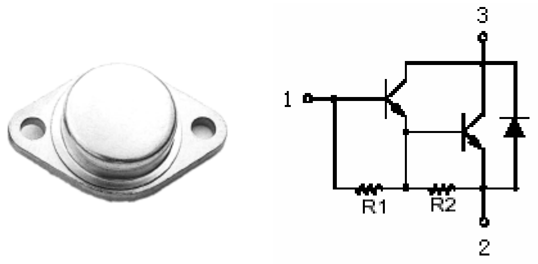

Fig.1 simplified outline (TO-3) and symbol

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector-emitter voltage	Open base	120	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		12	A
I_{CM}	Collector current(peak)		16	A
I_B	Base current		0.2	A
P_T	Total power dissipation	T_C=25□	117	W
T_j	Junction temperature		-55~200	□
T_{stg}	Storage temperature		-55~200	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance from junction to case	1.5	□/W

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.1A ; I_B=0;L=25mH	120			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=5A ;I_B=20mA			2	V
V_{BE}	Base-emitter voltage	I_C=5A;V_{CE}=3V			3	V
I_{CBO}	Collector cut-off current	V_{CB}=120V; I_E=0 T_C=150℃			0.4 3	mA
I_{CEO}	Collector cut-off current	V_{CE}=60V; I_B=0			1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			5	mA
V_F	Diode forward voltage	I_F=3A		1.8		V
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=3V		1500		
h_{FE-2}	DC current gain	I_C=5A ; V_{CE}=3V	1000			
h_{FE-3}	DC current gain	I_C=10A ; V_{CE}=3V		1500		
f_T	Transition frequency	I_C=5A ; V_{CE}=3V		7		MHz

PACKAGE OUTLINE

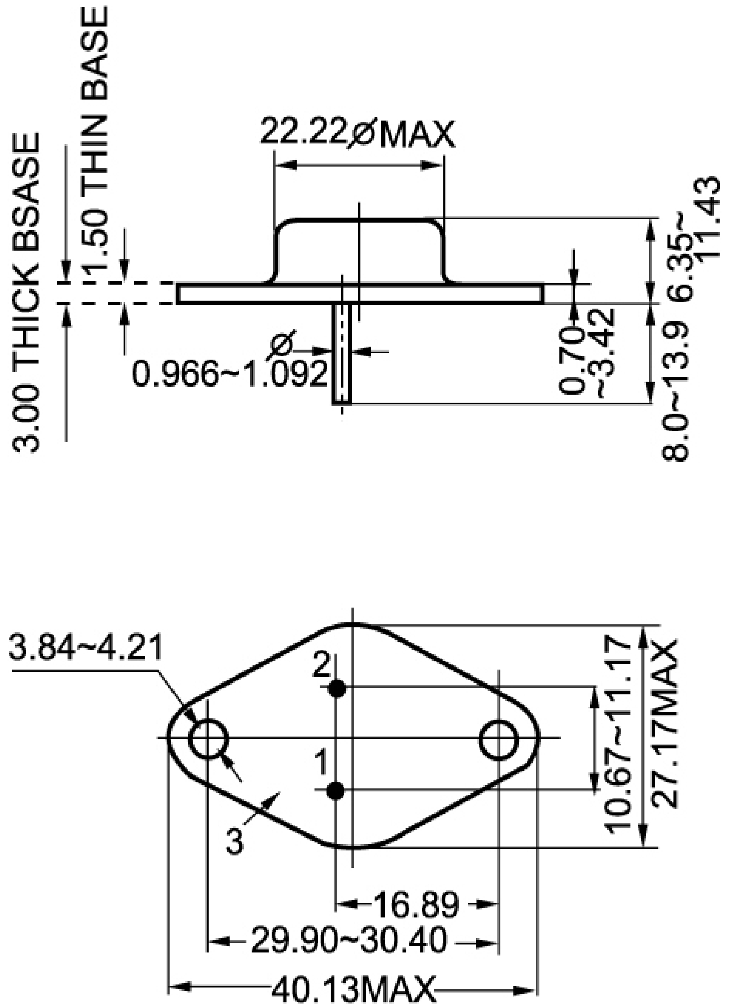

Fig.2 Outline dimensions