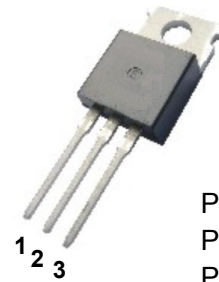


DESCRIPTION

- With TO-220 package
- Complement to type TIP3055
- 90 W at 25°C case temperature
- 15 A continuous collector current

APPLICATIONS

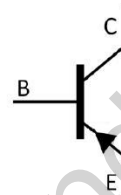
- Designed for general-purpose switching and amplifier applications.



PIN1 : Base
 PIN 2 : Collector
 PIN 3 : Emitter

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter


Absolute maximum ratings(Ta=)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		15	A
I_B	Base current		7	A
P_C	Collector power dissipation	$T_C=25$	90	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-65~150	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance junction to case	1.39	/W

CHARACTERISTICS
T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =30mA ; I _B =0	60			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =4A ; I _B =0.4A			1.1	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =10A ; I _B =3.3A			3.0	V
V _{BE}	Base-emitter on voltage	I _C =4A ; V _{CE} =4V			1.5	V
I _{CEO}	Collector cut-off current	V _{CE} =30V ; I _B =0			0.7	mA
I _{CER}	Collector cut-off current	V _{CE} =70Vdc ; R _{BE} =100Ohm			1.0	mA
I _{CEV}	Collector cut-off current	V _{CE} =100Vdc, V _{BE(off)} =1.5Vdc			5.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V ; I _C =0			5.0	mA
h _{FE-1}	DC current gain	I _C =4A ; V _{CE} =4V	20		70	
h _{FE-2}	DC current gain	I _C =10A ; V _{CE} =4V	5.0			
I _{s/b}	Second breakdown collector current With base forward biased	V _{CE} =30Vdc, t=1.0s, Nonrepetitive	3.0			A
f _T	Transition frequency	I _C =0.5A ; V _{CE} =10V	2.5			MHz

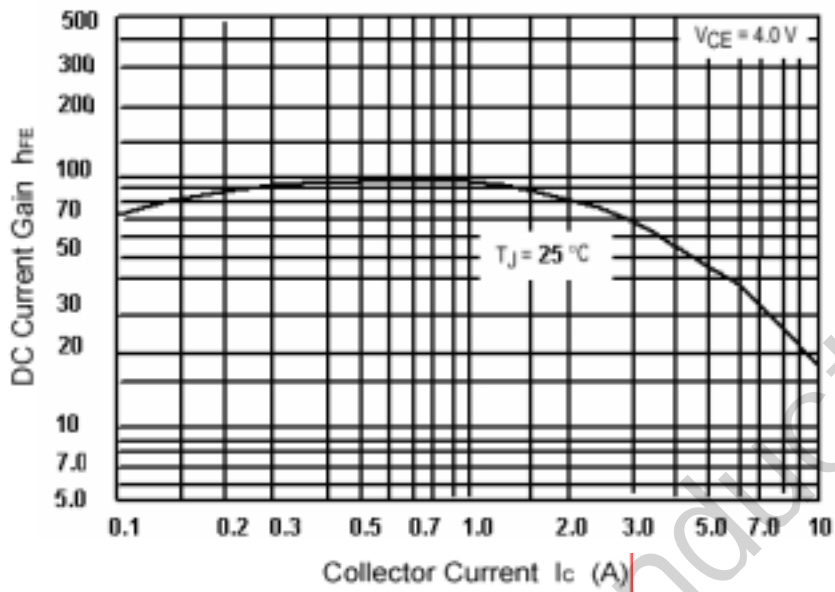


Fig.3 DC current Gain

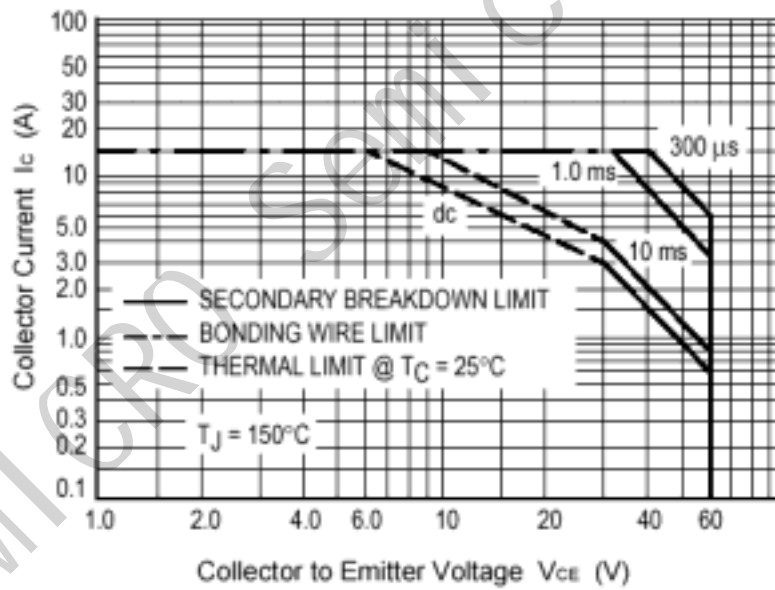
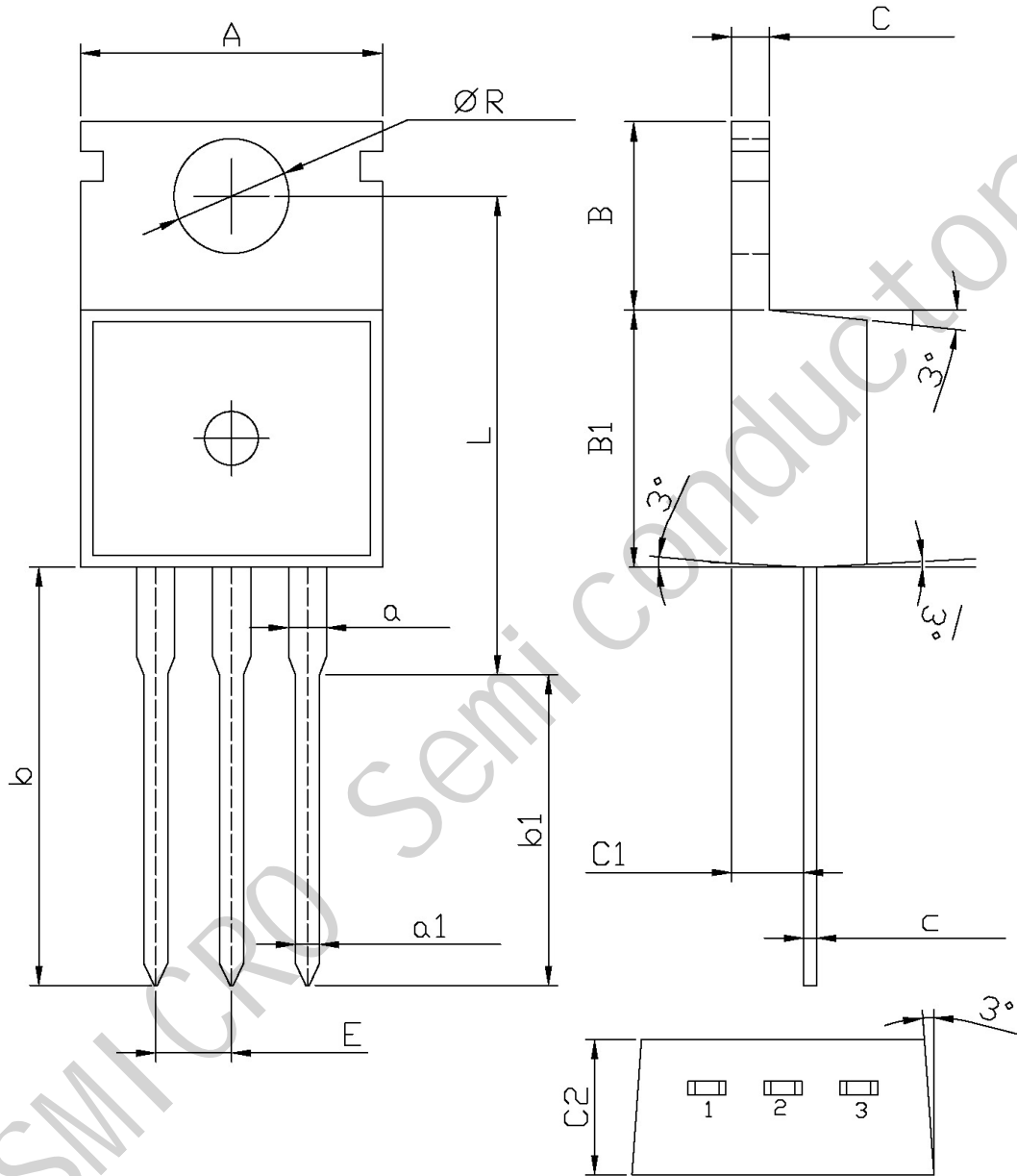


Fig.4 Safe Operating Area

PACKAGE OUTLINE



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
b	12.6	13.6	C1	2.2	2.6
b1	9.6	10.6	a1	0.7	0.9
a	1.22	1.32	c	0.4	0.6
E	2.34	2.74	C2	4.3	4.7