

Silicon NPN Power Transistors

2SC4764

DESCRIPTION

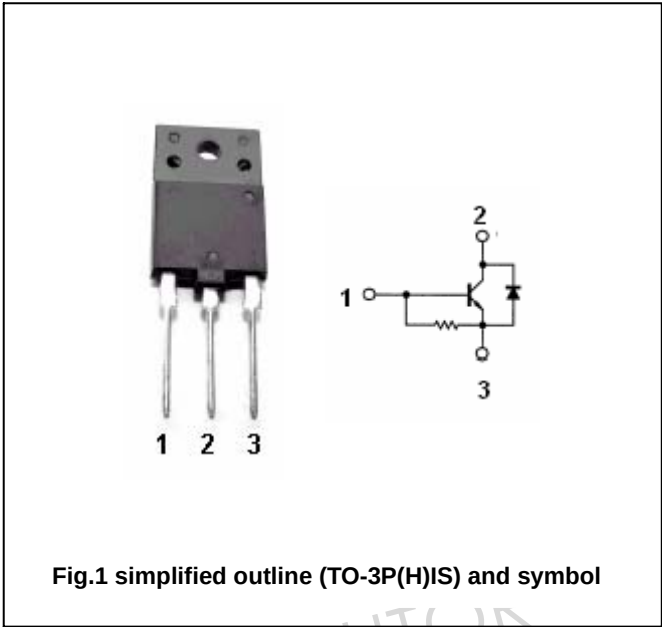
- With TO-3P(H)IS package
- High speed
- High voltage
- Low saturation voltage
- Built-in damper diode

APPLICATIONS

- Horizontal deflection output for medium resolution display

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	1500	V
V _{CEO}	Collector-emitter voltage	Open base	600	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		±6	A
I _{CM}	Collector current-Peak		±12	A
I _B	Base current		3	A
P _C	Collector power dissipation	T _C =25°C	50	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

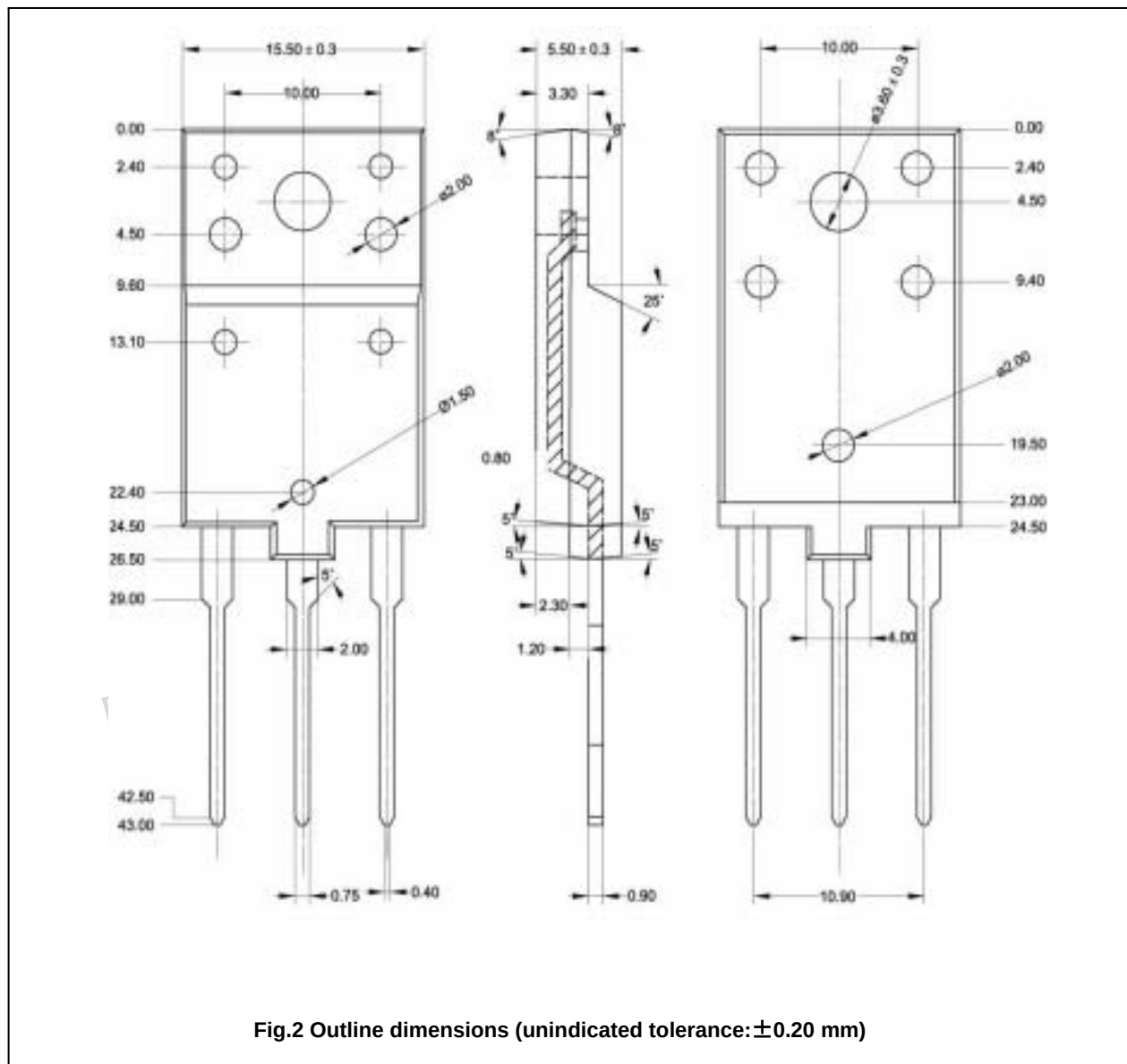
Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=300mA$; $I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=4A$; $I_B=0.8A$			5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=4A$; $I_B=0.8A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=1500V$; $I_E=0$			1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V$; $I_C=0$	83		250	mA
h_{FE-1}	DC current gain	$I_C=1A$; $V_{CE}=5V$	8	12		
h_{FE-2}	DC current gain	$I_C=4A$; $V_{CE}=5V$	5		9	
C_{ob}	Collector output capacitance	$I_E=0$; $V_{CB}=10V$; $f=1MHz$		170		pF
V_F	Diode forward voltage	$I_F=4A$		1.2	1.8	V
f_T	Transition frequency	$I_C=0.1A$; $V_{CE}=10V$	1	3		MHz
Switching times resistive load						
t_s	Storage time	$I_{CP}=4A$; $I_{B1}=0.8A$ $I_{B2}=-1.6A$; $R_L=51\Omega$		1.6	2.5	μs
t_f	Fall time			0.1	0.2	μs

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PACKAGE OUTLINE



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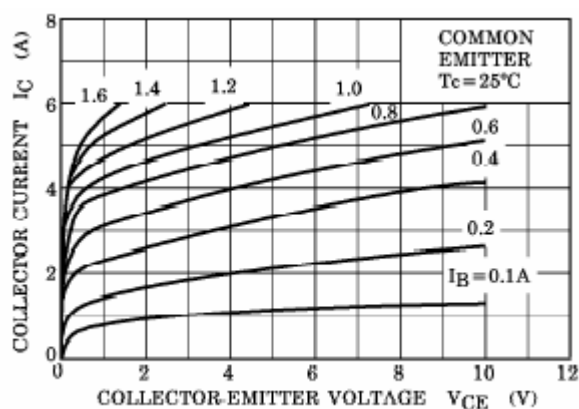


Fig.3 Static Characteristic

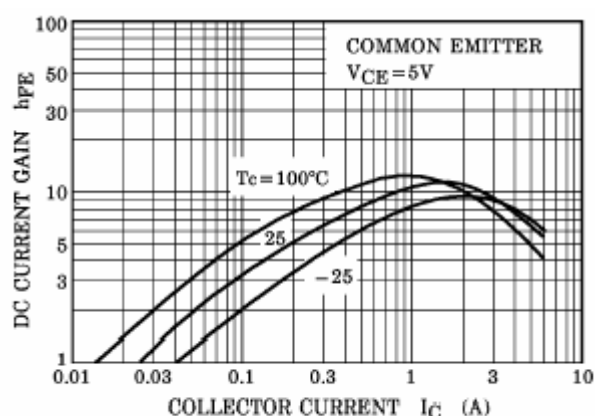


Fig.4 DC current Gain

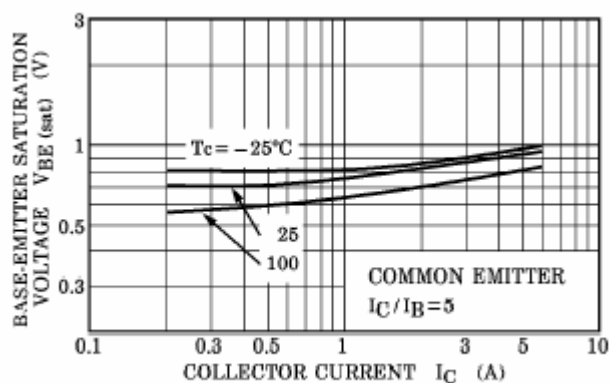


Fig.5 Base-Emitter Saturation Voltage

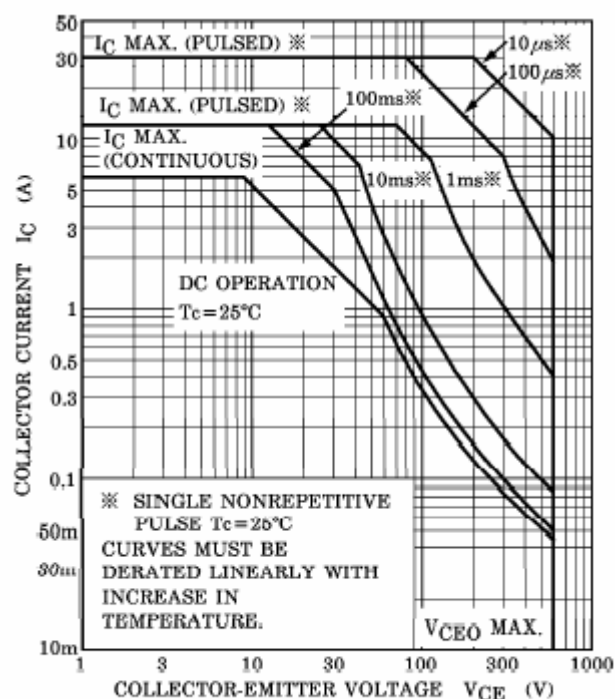


Fig.6 Safe Operating Area