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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# 2SC4388

Silicon NPN Triple Diffused Planar Transistor (Complement to type 2SA1673)

Application : Audio and General Purpose

### Absolute maximum ratings (Ta=25°C)

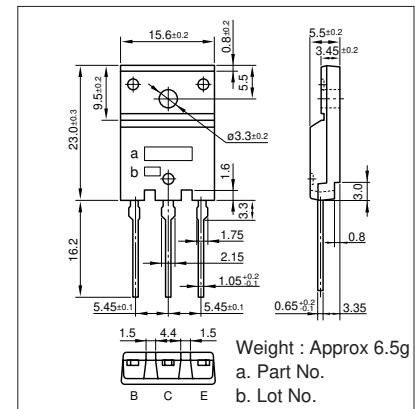
Symbol	Ratings	Unit
V <sub>CB0</sub>	200	V
V <sub>CE0</sub>	180	V
V <sub>EB0</sub>	6	V
I <sub>c</sub>	15	A
I <sub>B</sub>	4	A
P <sub>c</sub>	85(T <sub>c</sub> =25°C)	W
T <sub>J</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

### Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings	Unit
I <sub>CB0</sub>	V <sub>CB</sub> =200V	10max	μA
I <sub>EB0</sub>	V <sub>EB</sub> =6V	10max	μA
V <sub>(BR)CEO</sub>	I <sub>c</sub> =50mA	180min	V
h <sub>FE</sub>	V <sub>CE</sub> =4V, I <sub>c</sub> =3A	50min*	
V <sub>CE(sat)</sub>	I <sub>c</sub> =5A, I <sub>B</sub> =0.5A	2.0max	V
f <sub>r</sub>	V <sub>CE</sub> =12V, I <sub>E</sub> =-0.5A	20typ	MHz
COB	V <sub>CB</sub> =10V, f=1MHz	300typ	pF

\*h<sub>FE</sub> Rank  $\bar{O}$ (50 to 100), P(70 to 140), Y(90 to 180)

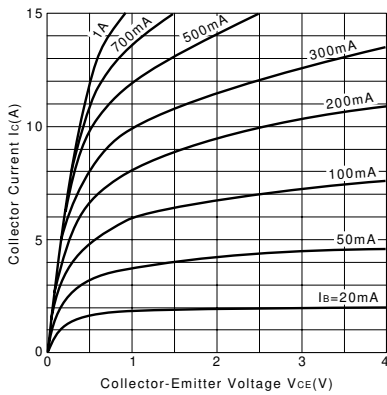
### External Dimensions FM100(TO3PF)



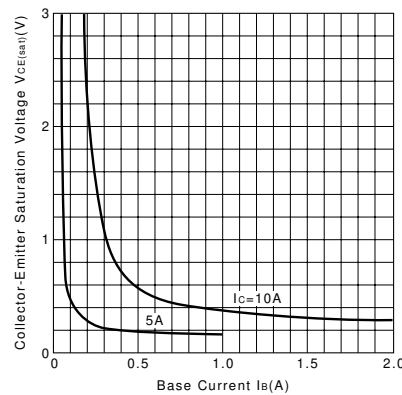
### Typical Switching Characteristics (Common Emitter)

V <sub>CC</sub> (V)	R <sub>L</sub> (Ω)	I <sub>c</sub> (A)	V <sub>BB1</sub> (V)	V <sub>BB2</sub> (V)	I <sub>B1</sub> (A)	I <sub>B2</sub> (A)	t <sub>on</sub> (μs)	t <sub>stg</sub> (μs)	t <sub>f</sub> (μs)
40	4	10	10	-5	1	-1	0.5max	1.8max	0.6max

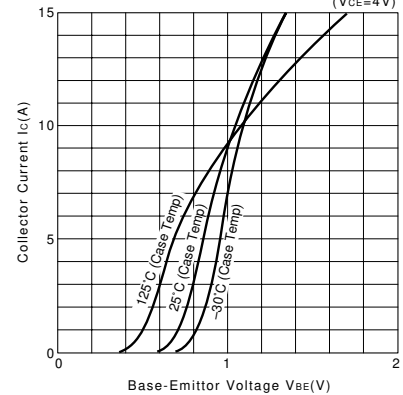
I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)



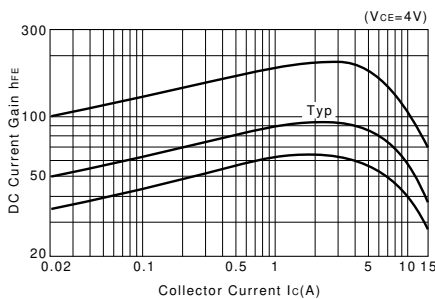
V<sub>CE(sat)</sub>-I<sub>B</sub> Characteristics (Typical)



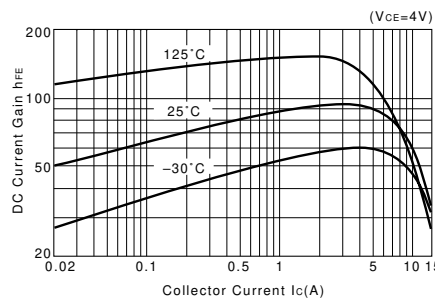
I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)



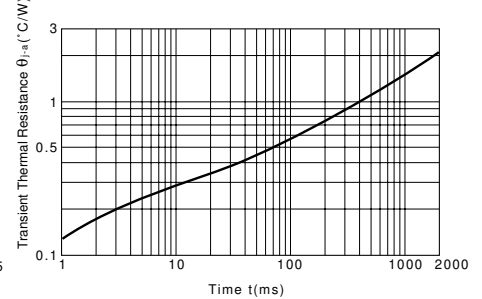
h<sub>FE</sub>-I<sub>c</sub> Characteristics (Typical)



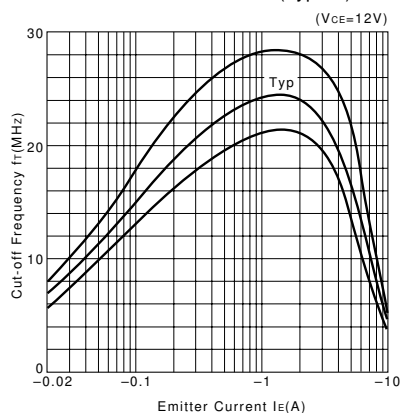
h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



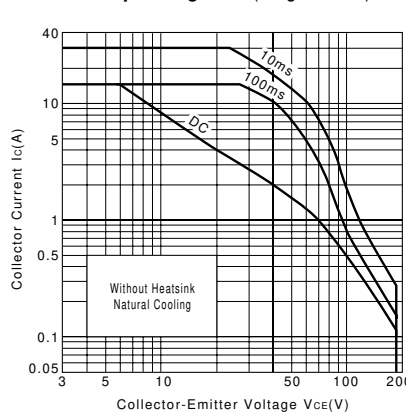
θ<sub>J-a</sub>-t Characteristics



f<sub>r</sub>-I<sub>E</sub> Characteristics (Typical)



Safe Operating Area (Single Pulse)



P<sub>c</sub>-T<sub>a</sub> Derating

