

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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



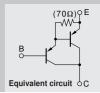




## **Darlington**

# 2SB1647

(Ta=25°C)



#### Silicon PNP Epitaxial Planar Transistor (Complement to type 2SD2560)

#### Application: Audio, Series Regulator and General Purpose

■Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit		
Vсво	-150	V		
VCEO	-150	V		
VEBO	<b>-</b> 5	V		
Ic	-15	Α		
Ів	<b>-1</b>	Α		
Pc	130(Tc=25°C)	W		
Tj	150	°C		
Tstg	-55 to +150	°C		

#### **■**Electrical Characteristics

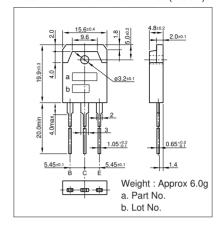
Symbol	Conditions	Ratings	Unit
Ісво	Vcb=-150V	-100max	μΑ
<b>І</b> ЕВО	VEB=-5V	-100max	μΑ
V(BR)CEO	Ic=-30mA	-150min	٧
hfE	Vce=-4V, Ic=-10A	5000min*	
VcE(sat)	Ic=-10A, IB=-10mA	-2.5max	٧
V <sub>BE</sub> (sat)	Ic=-10A, IB=-10mA	-3.0max	٧
fτ	Vce=-12V, Ie=2A	45typ	MHz
Сов	VcB=-10V, f=1MHz	320typ	pF

\*hfE Rank \(\overline{O}(5000 to 12000), P(6500 to 20000), Y(15000 to 30000)

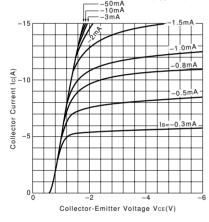
#### ■Typical Switching Characteristics (Common Emitter)

Vcc (V)	RL (Ω)	Ic (A)	V <sub>BB1</sub> (V)	VBB2 (V)	I <sub>B1</sub> (mA)	I <sub>B2</sub> (mA)	ton (μs)	tstg (µs)	tf (μs)
-40	4	10	-10	5	-10	10	0.7typ	1.6typ	1.1typ

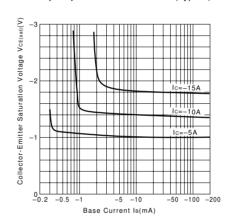
External Dimensions MT-100(TO3P)



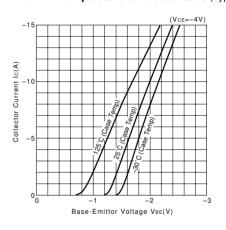
#### Ic-VcE Characteristics (Typical)



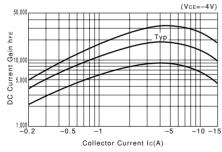
#### VcE(sat)-IB Characteristics (Typical)



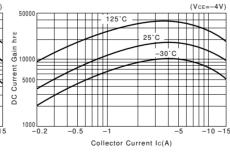
Ic-VBE Temperature Characteristics (Typical)



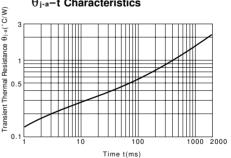
hfe-Ic Characteristics (Typical)



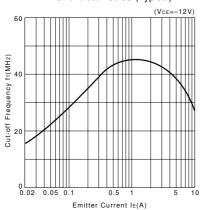
hfe-Ic Temperature Characteristics (Typical)



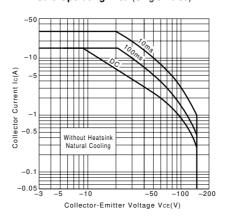
θ<sub>j-a</sub>-t Characteristics



fT-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

