## imall

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

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# **SMA4020**

#### PNP Darlington General purpose

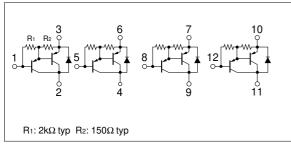
(Ta=25°C)

#### Absolute maximum ratings

		,	
Symbol	bol Ratings		
Vсво	-60	V	
VCEO	-60	V	
Vebo	-6	V	
lc	-4	Α	
Ів	-1	A	
Рт	4 (Ta=25°C)	w	
	20 (Tc=25°C)	1 VV	
Tj	150	°C	
Tstg	-40 to +150	°C	

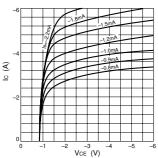
Electrical characteristics (Ta=25°C)							
Symbol	S min	pecificatio	on max	Unit	Conditions		
Ісво			-10	μA	Vcb=-60V		
Іево			-10	mA	Veb=-6V		
VCEO	-60			V	lc=-10mA		
hfe	2000				Vce=-4V, Ic=-3A		
Vce(sat)			-1.5	V	Ic=–3A, Iв=–6mA		

#### ■Equivalent circuit diagram

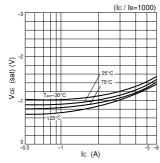


#### Characteristic curves

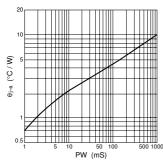
#### IC-VCE Characteristics (Typical)



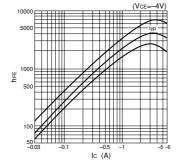
VCE(sat)-Ic Temperature Characteristics (Typical)



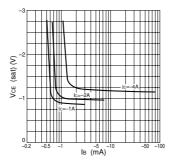
 $\theta_{j-a}$ -PW Characteristics



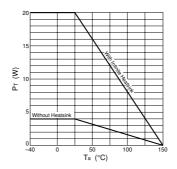
hFE-Ic Characteristics (Typical)



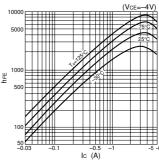
VCE(sat)-IB Characteristics (Typical)



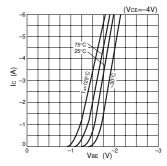
PT-Ta Characteristics







IC-VBE Temperature Characteristics (Typical)



Safe Operating Area (SOA)

