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Stocking Distributor

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[SMA4020](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

SMA4020

PNP Darlington
 General purpose

External dimensions SMA

Absolute maximum ratings

($T_a=25^\circ\text{C}$)

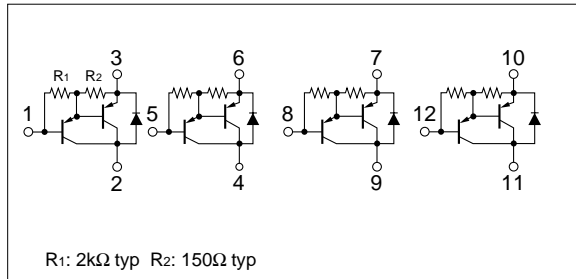
Symbol	Ratings	Unit
V_{CB0}	-60	V
V_{CE0}	-60	V
V_{EB0}	-6	V
I_C	-4	A
I_B	-1	A
P_T	4 ($T_a=25^\circ\text{C}$)	W
	20 ($T_c=25^\circ\text{C}$)	
T_j	150	$^\circ\text{C}$
T_{stg}	-40 to +150	$^\circ\text{C}$

Electrical characteristics

($T_a=25^\circ\text{C}$)

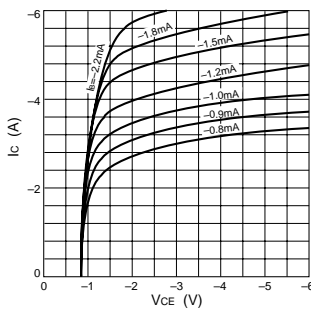
Symbol	Specification			Unit	Conditions
	min	typ	max		
I_{CB0}			-10	μA	$V_{CB}=-60\text{V}$
I_{EB0}			-10	mA	$V_{EB}=-6\text{V}$
V_{CE0}	-60			V	$I_C=-10\text{mA}$
h_{FE}	2000				$V_{CE}=-4\text{V}$, $I_C=-3\text{A}$
$V_{CE(sat)}$			-1.5	V	$I_C=-3\text{A}$, $I_B=-6\text{mA}$

Equivalent circuit diagram

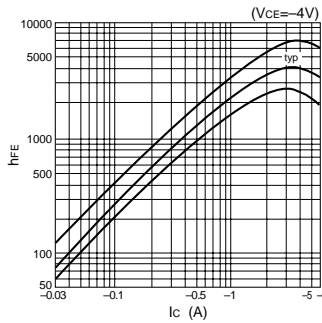


Characteristic curves

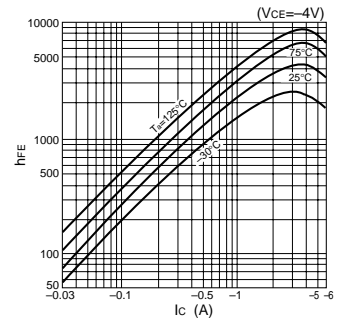
I_C - V_{CE} Characteristics (Typical)



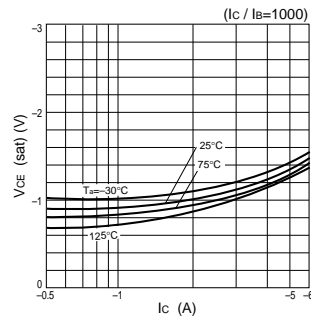
h_{FE} - I_C Characteristics (Typical)



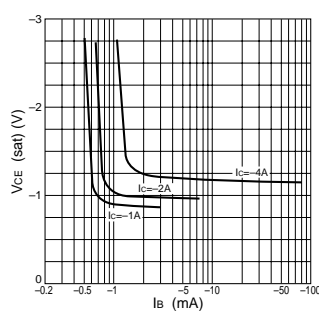
h_{FE} - I_C Temperature Characteristics (Typical)



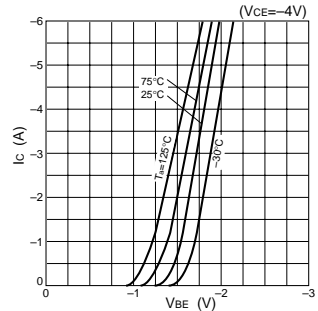
$V_{CE(sat)}$ - I_C Temperature Characteristics (Typical)



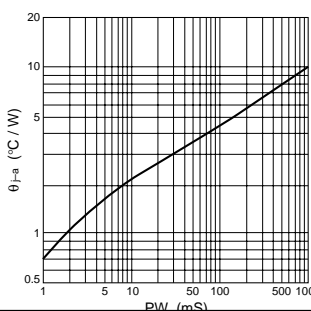
$V_{CE(sat)}$ - I_B Characteristics (Typical)



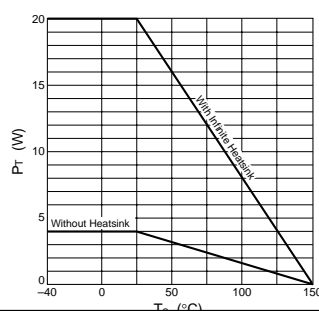
I_C - V_{BE} Temperature Characteristics (Typical)



θ_{j-a} -PW Characteristics



P_T - T_a Characteristics



Safe Operating Area (SOA)

