2SA1011

Rev.H Oct.-2018

DATA SHEET

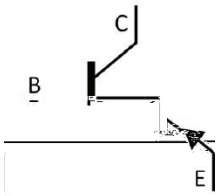
/ Descriptions

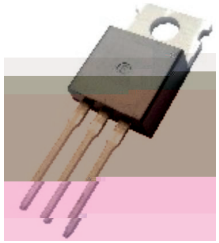
Silicon PNP transistor in a TO-220 Plastic Package.

/ Featuf9324.4P523n12 0.2116 0.0941180.0033n12 057-54 68 0848.24 18ref62.4 68 0846938.08fB/TT81 Tf

Complementary pair with 2SC2344.

High voltage switching, AF power amplifier, 100W output predriver applications.





PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

/ Absolute Maximum Ratings(Ta=25)

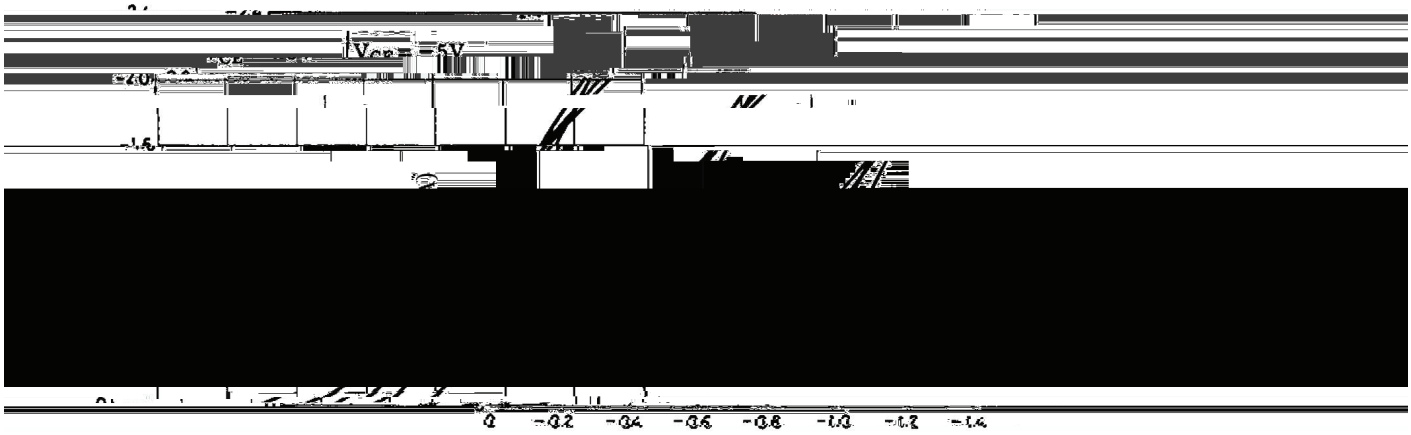
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-180	V
Collector to Emitter Voltage	V_{CEO}	-160	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current - Continuous	I_C	-1.5	A
Collector Current – Continuous(Pulse)	I_{CP}	-3.0	A
Collector Power Dissipation	P_C	2.0	W
	$P_C(T_C=25$)	25	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CBO}	I_C=-1.0mA I_E=0	-180			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1.0mA I_B=0	-160			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-10mA I_C=0	-6.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-120V I_E=0			-10	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-4.0V I_C=0			-10	A
DC Current Gain	h_{FE}	V_{CE}=-5.0V I_C=-300mA	60		200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-500mA I_B=-50mA		-0.5		V
Base to Emitter Voltage	V_{BE}	V_{CE}=-5.0V I_C=-10mA		-1.5		V
Transition Frequency	f_T	V_{CE}=-10V I_C=-50mA		100		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V f=1.0MHz		30		pF
Turn-On Time	t_{on}	$-10I_{B1}=10I_{B2}=-I_C$=-0.5A		0.29		s
Turn-Off Time	t_{off}			0.19		s
Storage Time	t_{stg}			0.48		s

/ Electrical Characteristic Curve

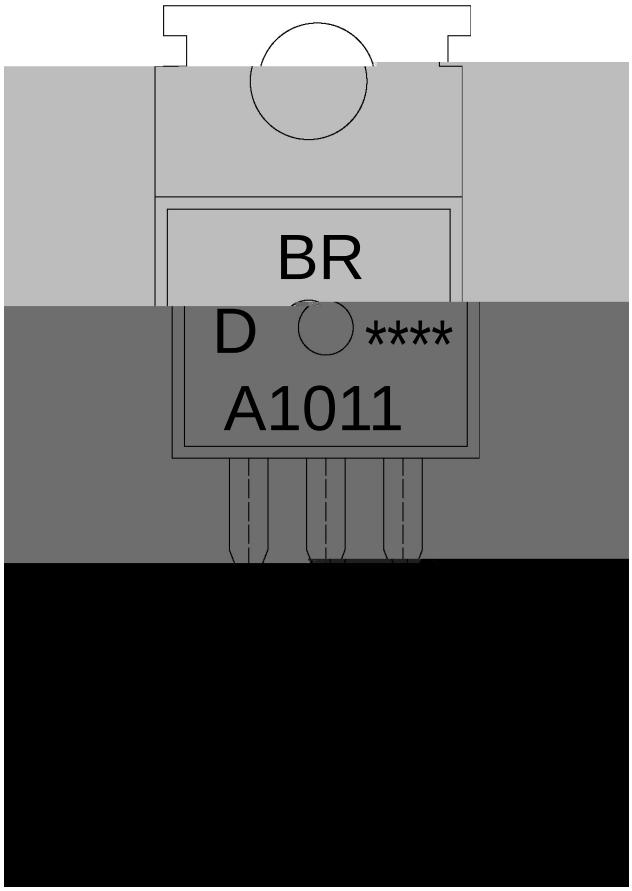
$I_C - V_{BE}$



V_{BE} (V)

/ Package Dimensions

/ Marking Instructions



BR

A1011

D h_{FE}

Note:

BR:	Company Code
A1011:	Product Type.
D:	h_{FE} Classifications Symbol
****:	Lot No. Code, code change with Lot No.