

/ Descriptions

Silicon PNP transistor in a TO-126F Plastic Package.

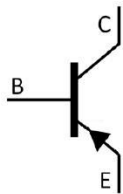
/ Features

High breakdown voltage, low collector saturation voltage, high speed switching.

/ Applications

High voltage switching, low power switching regulator, DC-DC converter.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

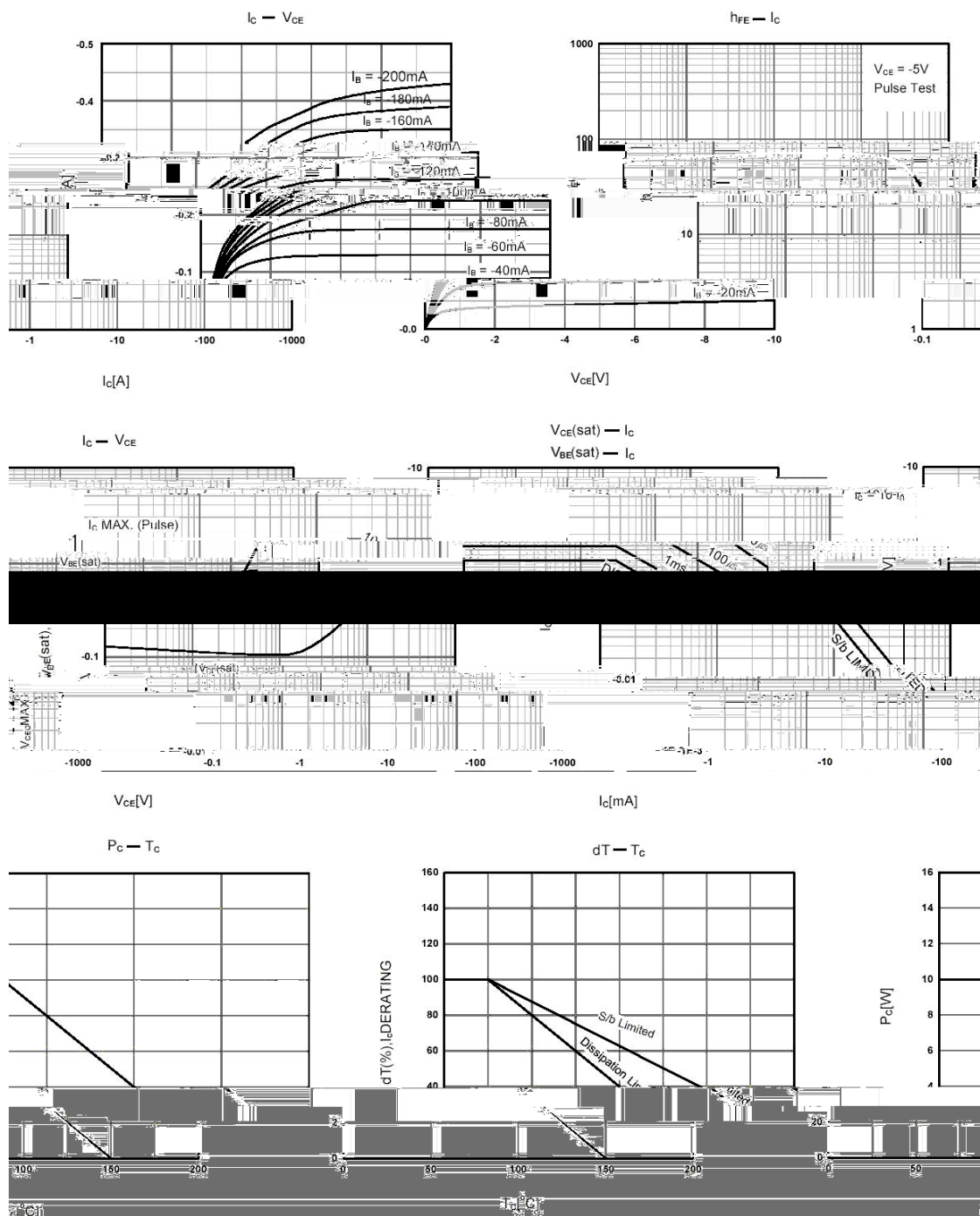
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	N	R	O	Y
h_{FE} Range	30 60	40 80	60 120	100 200

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-400	V
Collector to Emitter Voltage	V_{CEO}	-400	V
Emitter to Base Voltage	V_{EBO}	-7.0	V
Base Current - Continuous	I_B	-0.25	A
Collector Current – Continuous	I_C	-500	mA
Collector Current – Continuous(Pulse)	I_{CP}	-1.0	A
Collector Power Dissipation	P_C	1.0	W
Collector Power Dissipation	$P_C(T_C=25^\circ\text{C})$	10	W
Junction Temperature	T_J	150	
Storage Temperature Range	T_{stg}	-55 150	

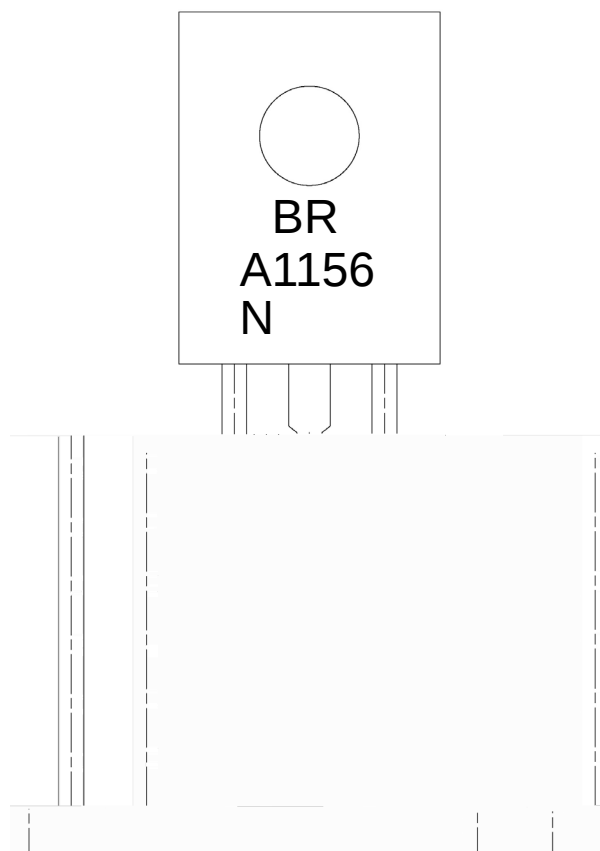
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=-100\text{mA}$ $I_B=-10\text{mA}$ $L=20\text{mH}$	-400			V
	$V_{CEX(SUS)}$	$I_C=-200\text{mA}$ $V_{BE(off)}=5\text{V}$ $I_{B1}=-I_{B2}=-20\text{mA}$ $L=10\text{mH}$	-400			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-400\text{V}$ $I_E=0$			-100	A
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5.0\text{V}$ $I_C=0$			-10	A
Collector Cut-Off Current	I_{CEX1}	$V_{CE}=-400\text{V}$ $V_{BE(off)}=1.5\text{V}$			-100	A
	I_{CEX2}	$V_{CE}=-400\text{V}$ $T_C=125^\circ\text{C}$ $V_{BE(off)}=1.5\text{V}$			-1.0	mA
DC Current Gain	h_{FE}	$V_{CE}=-5.0\text{V}$ $I_C=-100\text{mA}$	30		200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}$ $I_B=-10\text{mA}$			-1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-100\text{mA}$ $I_B=-10\text{mA}$			-1.2	V
Turn On Time	t_{ON}	$V_{CC}=-150\text{V}$ $I_{B1}=-10\text{mA}$ $R_L=1.5\text{K}$ $I_C=-100\text{mA}$			1.0	S
Storage Time	t_{STG}	$I_{B2}=20\text{mA}$			4.0	S
Fall Time	t_F				1.0	

/ Electrical Characteristic Curve



KSA1156

/ Marking Instructions



Note:

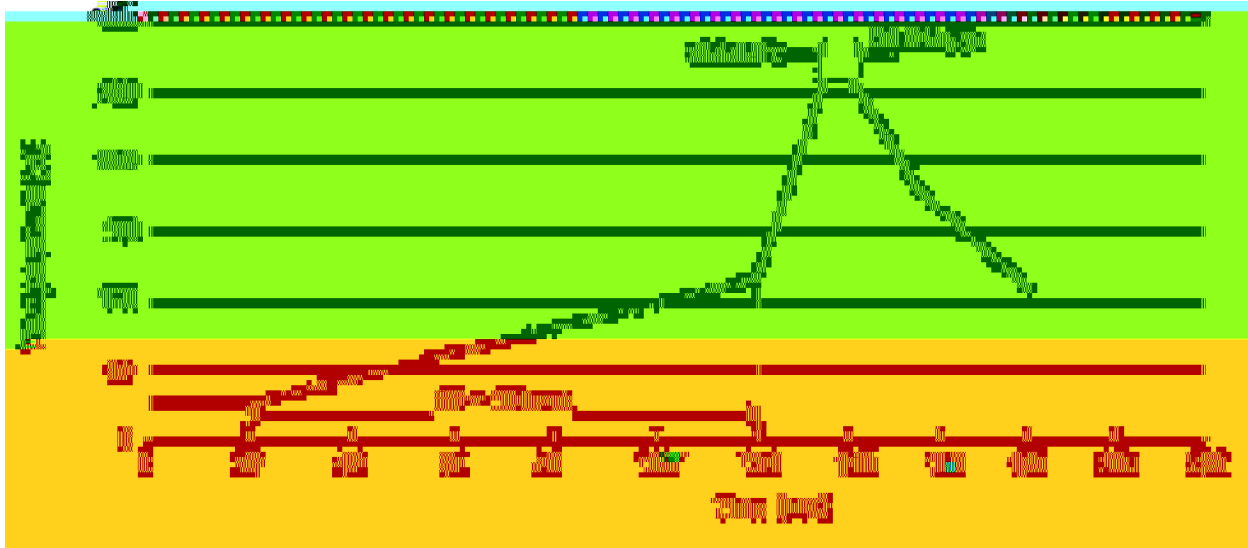
BR: Company Code

A1156: Product Type.

N: h_{FE} Classifications Symbol

***: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270 5 10 1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱

/ Notices