

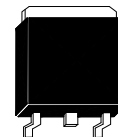


HJ2584

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HJ2584 is designed for use in low voltage and low drop out regulator applications.



TO-252

Absolute Maximum Ratings (T_A=25°C)

- Maximum Temperatures
 - Storage Temperature -55 ~ +150 °C
 - Junction Temperature +150 °C
- Maximum Power Dissipation
 - Total Power Dissipation (T_{case}=25°C)..... 20 W
- Maximum Voltages and Currents
 - BV_{CBO} Collector to Base Voltage -35 V
 - BV_{CEO} Collector to Emitter Voltage -35 V
 - BV_{EBO} Emitter to Base Voltage -5 V
 - I_C Collector Current..... -10 A

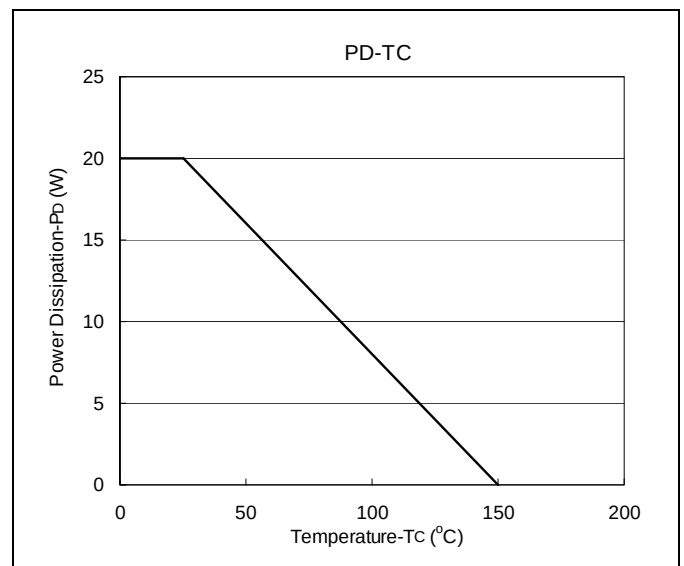
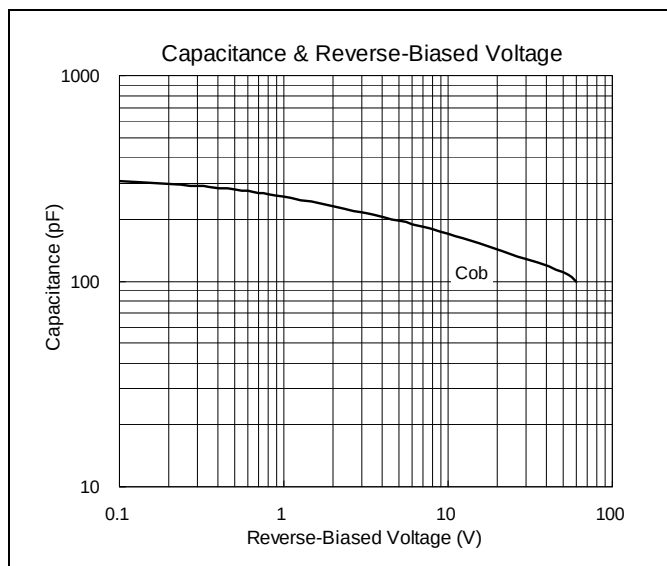
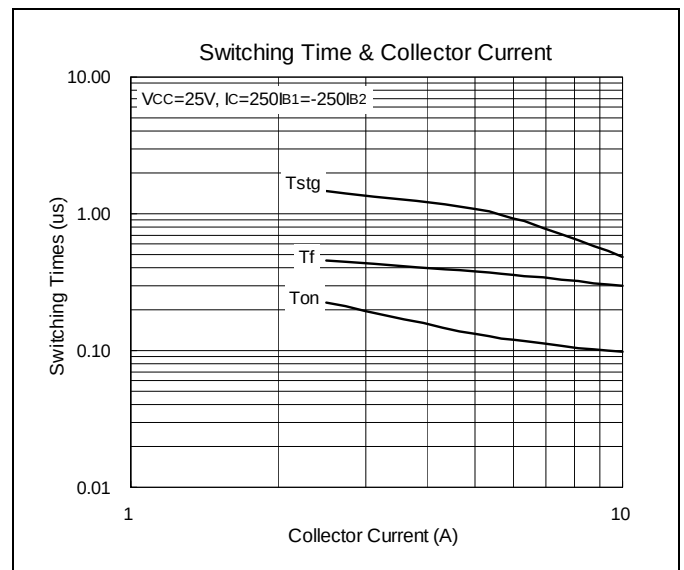
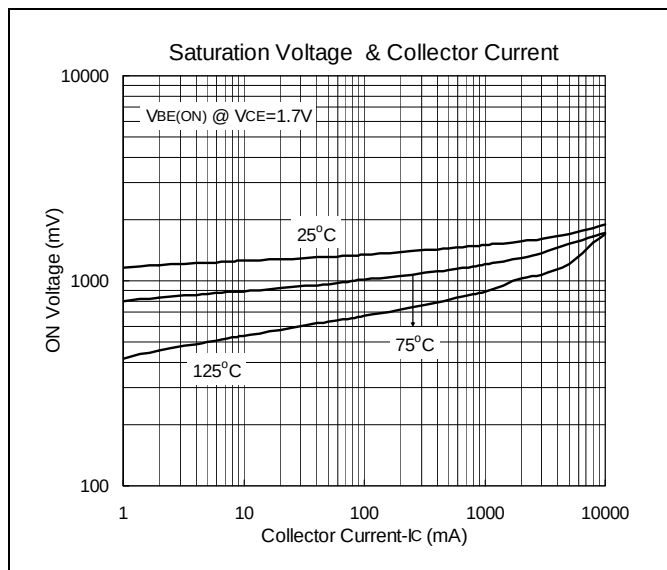
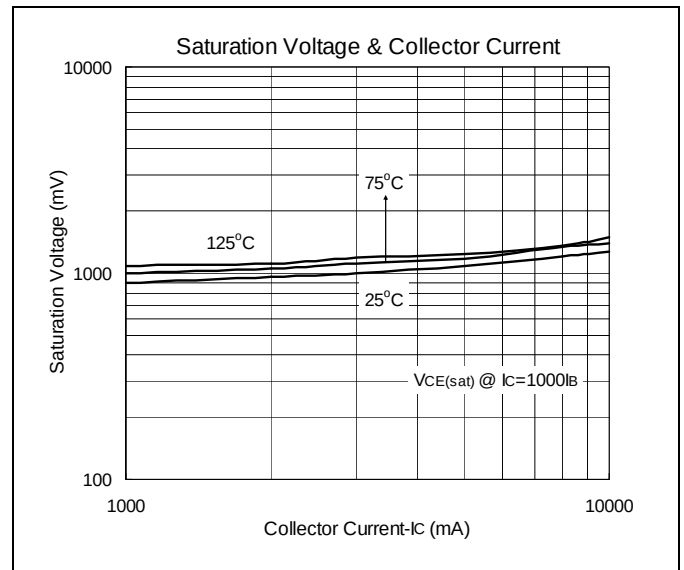
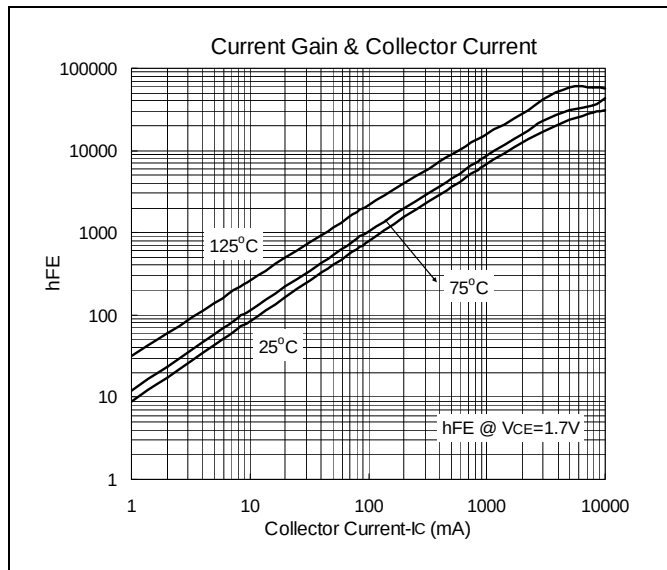
Electrical Characteristics (T_A=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CEO}	-35	-	-	V	I _C =-100uA
I _{CBO}	-	-	-10	uA	V _{CB} =-20V
I _{CEO}	-	-	-20	uA	V _{CE} =-15V
I _{EBO}	-	-	-2	mA	V _{EB} =-5V
*V _{CE(sat)}	-	-	-1.5	V	I _C =-10A, I _B =-10mA
*V _{BE(on)}	-	-	-2	V	I _C =-5A, V _{CE} =-1.7V
*h _{FE1}	2	-	60	K	I _C =-500mA, V _{CE} =-1.7V
*h _{FE2}	1	15	60	K	I _C =-10A, V _{CE} =-1.7V

*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

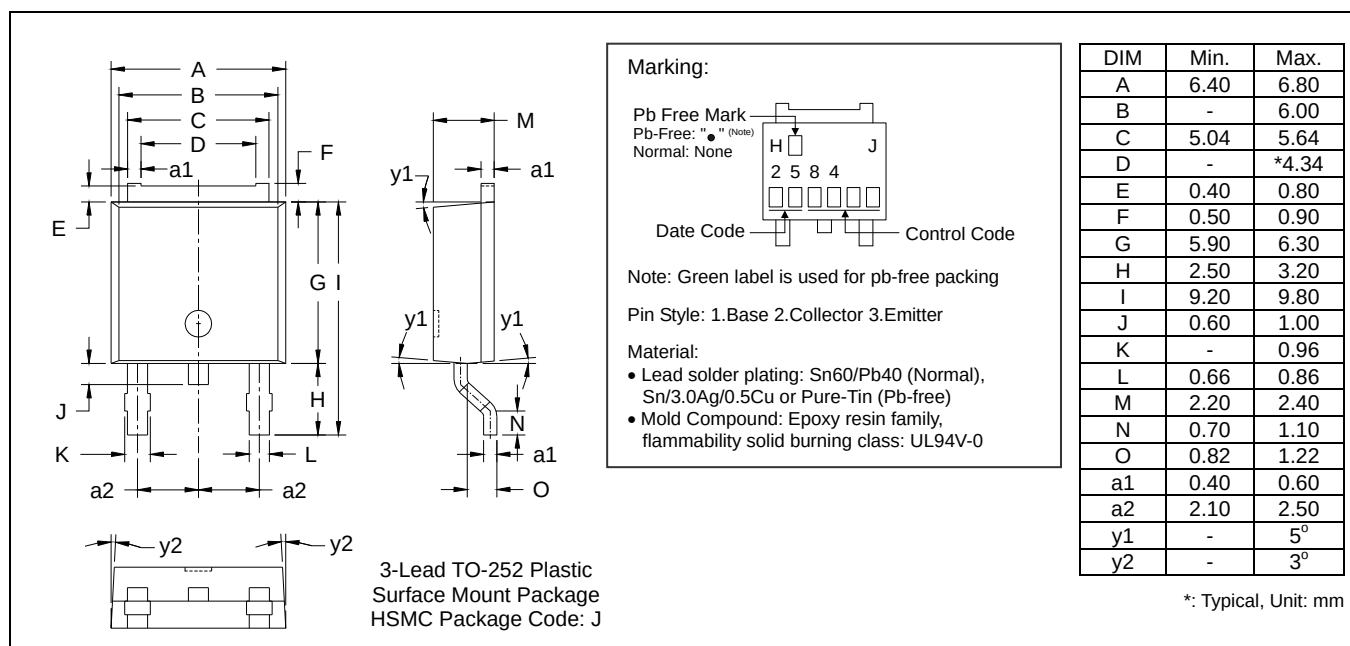
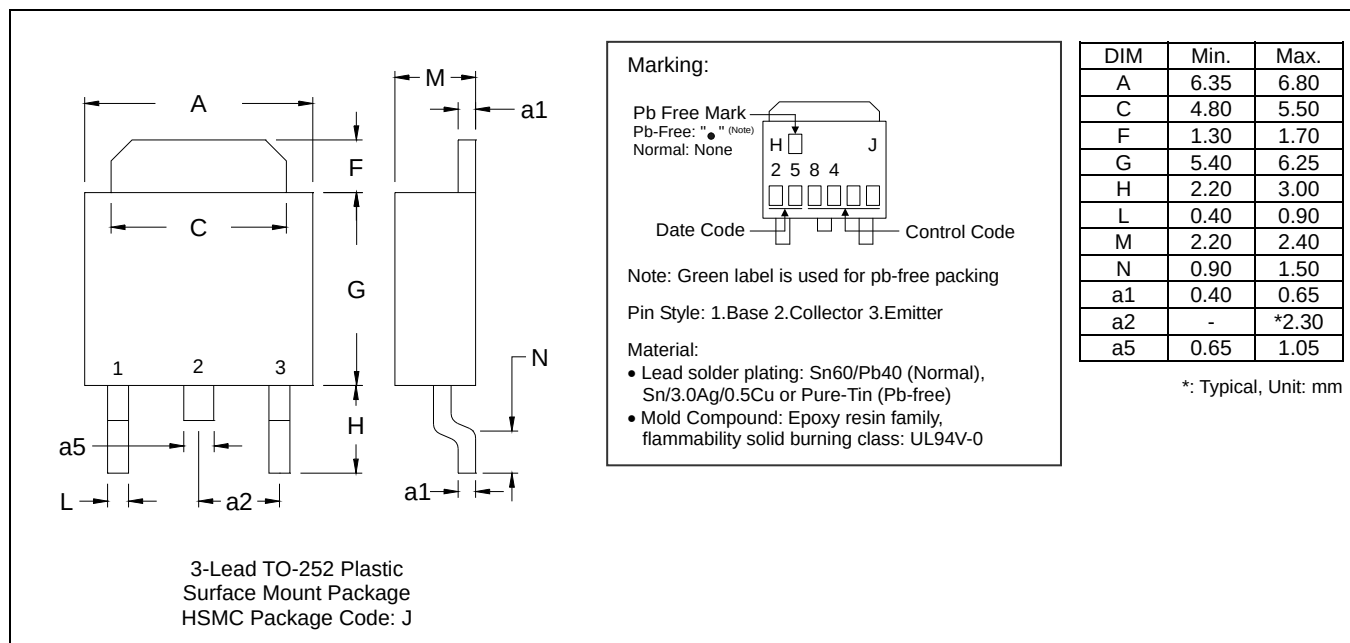


Characteristics Curve





TO-252 Dimension



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Head Office And Factory:

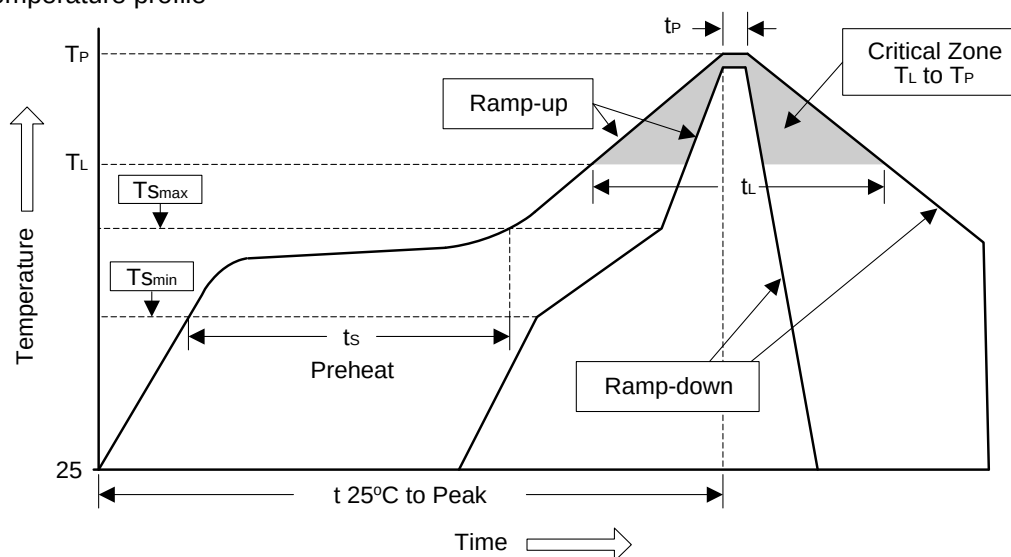
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Soldering Methods for HSMC's Products

1. Storage environment: Temperature=10°C~35°C Humidity=65%±15%
2. Reflow soldering of surface-mount devices

Figure 1: Temperature profile



Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	$<3^{\circ}\text{C}/\text{sec}$	$<3^{\circ}\text{C}/\text{sec}$
Preheat		
- Temperature Min (T_{Smin})	100°C	150°C
- Temperature Max (T_{Smax})	150°C	200°C
- Time (min to max) (t_s)	60~120 sec	60~180 sec
T_{Smax} to T_L		
- Ramp-up Rate	$<3^{\circ}\text{C}/\text{sec}$	$<3^{\circ}\text{C}/\text{sec}$
Time maintained above:		
- Temperature (T_L)	183°C	217°C
- Time (t_L)	60~150 sec	60~150 sec
Peak Temperature (T_P)	240°C +0/-5°C	260°C +0/-5°C
Time within 5°C of actual Peak Temperature (t_P)	10~30 sec	20~40 sec
Ramp-down Rate	$<6^{\circ}\text{C}/\text{sec}$	$<6^{\circ}\text{C}/\text{sec}$
Time 25°C to Peak Temperature	<6 minutes	<8 minutes

3. Flow (wave) soldering (solder dipping)

Products	Peak temperature	Dipping time
Pb devices.	245°C ±5°C	10sec ±1sec
Pb-Free devices.	260°C ±5°C	10sec ±1sec