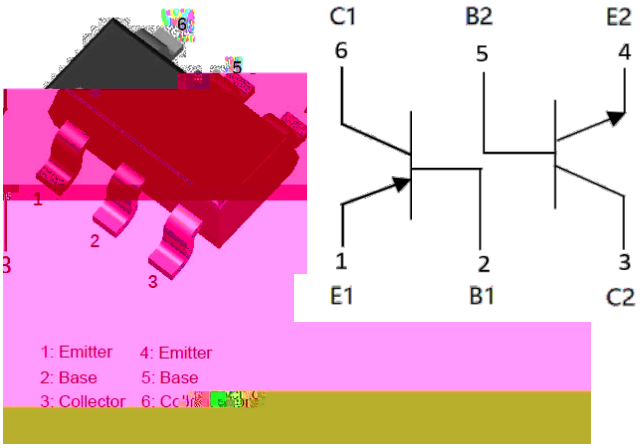
BC847DPN

PNP+NPN Transistor



Features

Moisture sensitivity level 1
Halogen free and RoHS compliant
Surface mount package ideally suited for automatic Insertion

Application

Signal amplification
Switching circuit

Mechanical data

Package SOT-23-6L
Terminals Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ **Maximum Ratings** (Ta=25 Unless otherwise specified

TR1 PNP Pin1 2 6

Item	Symbol	Unit	Conditions	Value
Device marking code			BC847DPN-Y	7Y
			BC847DPN-G	7G
Collector-base voltage	V_{CBO}	V	I_C=-100uA, I_E=0	-50
Collector-emitter voltage	V_{CEO}	V	I_C=-1mA, I_B=0	-50
Emitter-base voltage	V_{EBO}	V	I_E=-100uA, I_C=0	-5
Collector current	I_C	mA		-150
Power dissipation	P_D	mW		300
Operation junction temperature	T_j			-55 to +150
Storage temperature	T_{STG}			-55 to +150

TR2 NPN Pin3 4 5

Item	Symbol	Unit	Conditions	Value
Collector-base voltage	V_{CBO}	V	I_C=100uA, I_E=0	60

TR1 PNP Pin1 2 6

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	I_C=-100uA, I_E=0	-50		
Collector-emitter breakdown voltage	V					

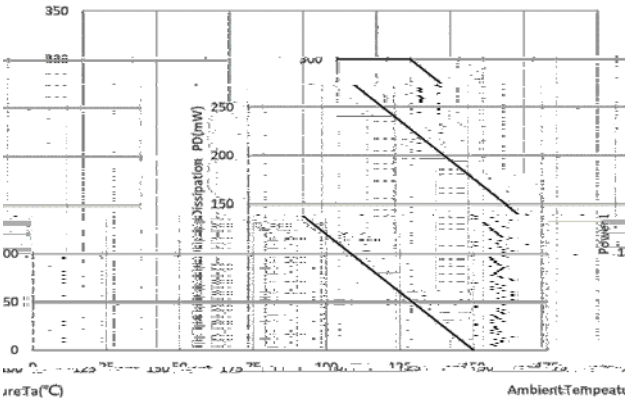
■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	/W	417
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	/W	334

Note:

1 Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 25.4*25.4mm copper pad areas

Fig 7 P_D-Ta Curve



TR2 NPN Pin3 4 5

Fig 1 Static Characteristics

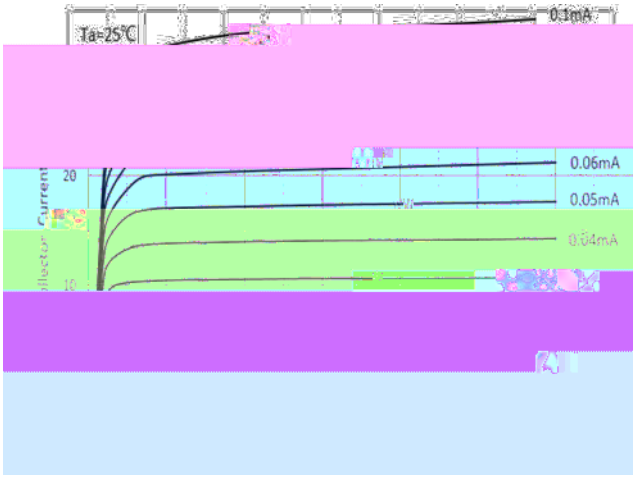


Fig 2 DC Current Gain

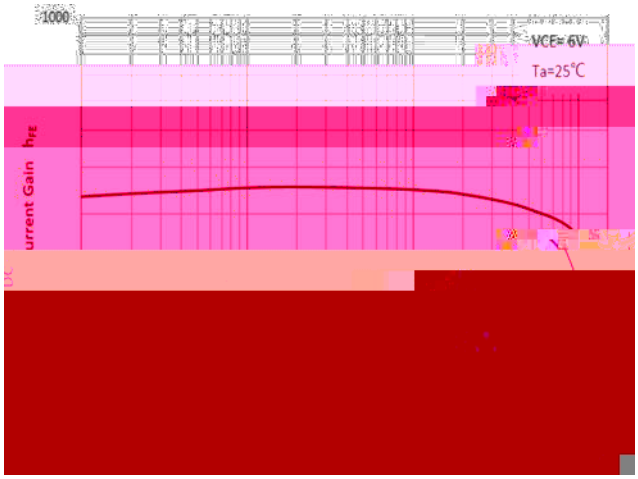


Fig 3 Collector-Emitter Saturation Voltage

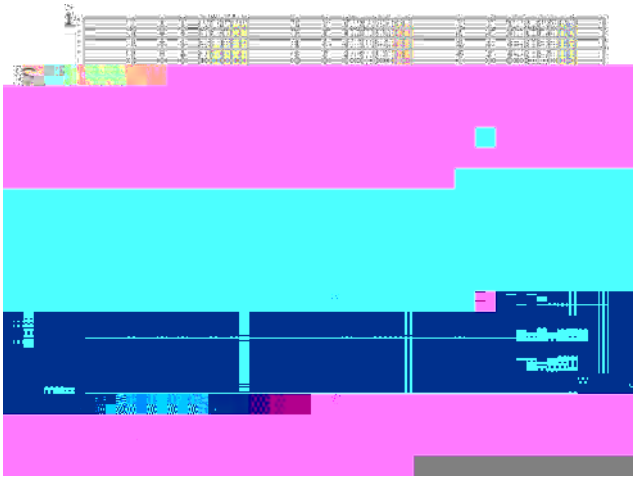


Fig 4 Base-Emitter Saturation Voltage

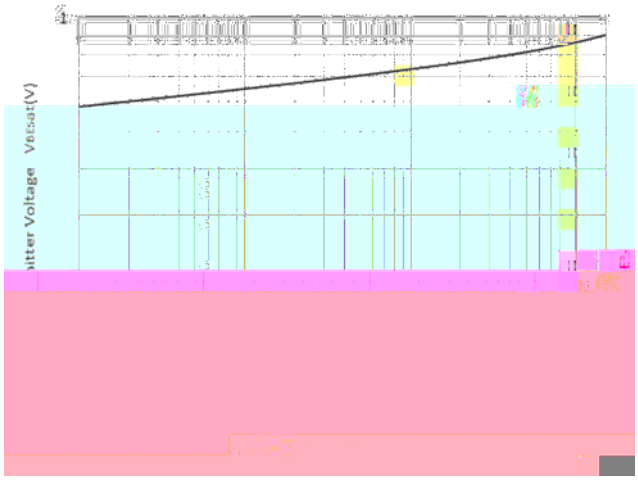


Fig 5 Base-Emitter On Voltage

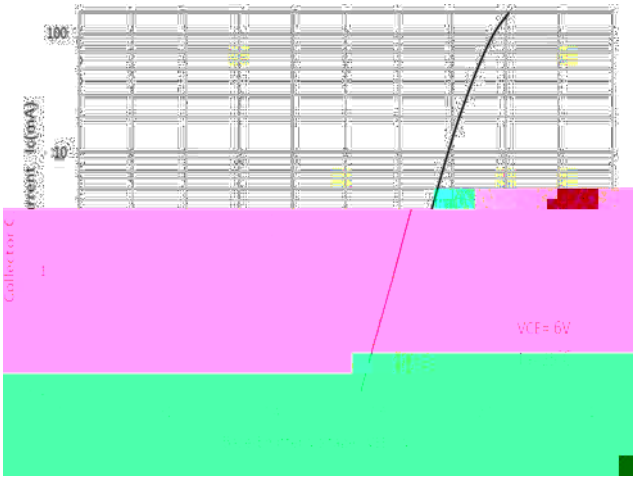
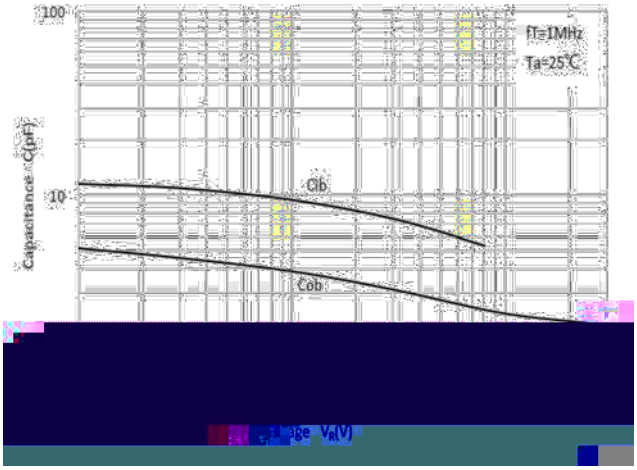


Fig 6 Cob/Cib-V_{CB}/V_{EB}



Prefered P/N	Packing Code	Unit weight(mg)	

Disclaimer

The information presented in this document is for reference onl