■ Electrical Characteristics (Ta=25℃ unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	I_C=-10μA,I_E=0	-80		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	I_C =-10mA,I_B=0	-65		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	I_E=-10μA,I_C=0	-5		
Collector cut-off current	I_{CBO}	nA	V_{CB}=-30V,I_B=0			-15
Emitter-base cutoff current	I_{EBO}	nA	V_{EB}=-5V, I_C=0			-100
DC current gain	h_{FE}		V_{CE}=-5V,I_C=-2mA	220		475
Collector-emitter saturation voltage	$V_{CE(sat)1}$	V	I_C=-10mA,I_B=-0.5mA			-0.3
	$V_{CE(sat)2}$	V	I_C=-100mA,I_B=-5mA			-0.65
Base-emitter voltage	V_{BE1}	V	V_{CE}=-5V,I_C=-2mA	-0.6		-0.75
	V_{BE2}	V	V_{CE}=-5V,I_C=-10mA			-0.82
Transition frequency	f_T	MHz	V_{CE}=-5V,I_C=-10mA,f=100MHz	100		

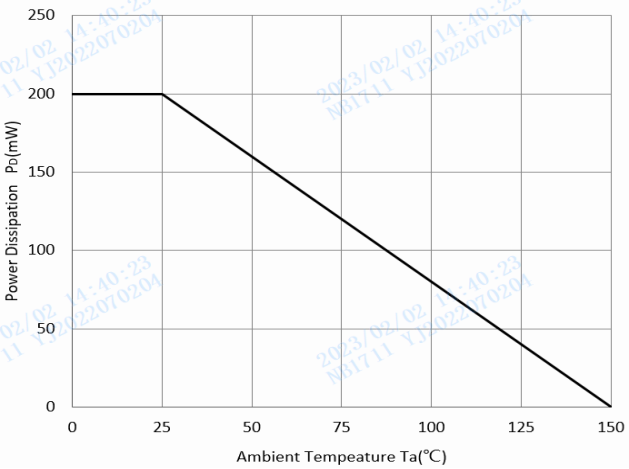
■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	/W	625
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	/W	500

Note:

（1）Device mounted on PCB, single-sided copper，with standard footprint

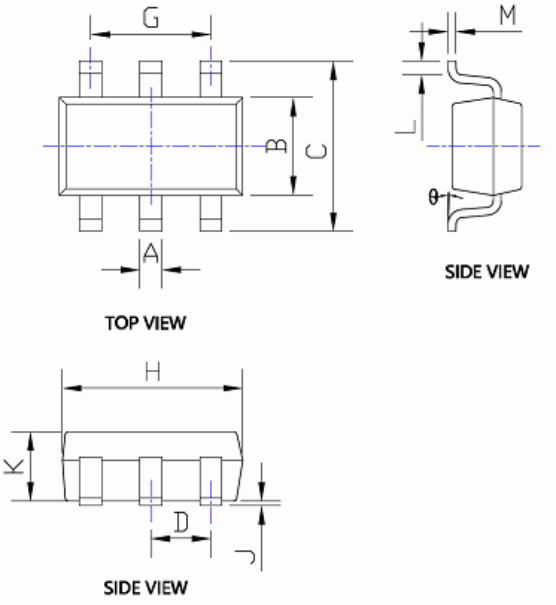
Fig 7 P_D-Ta Curve



■Ordering Information

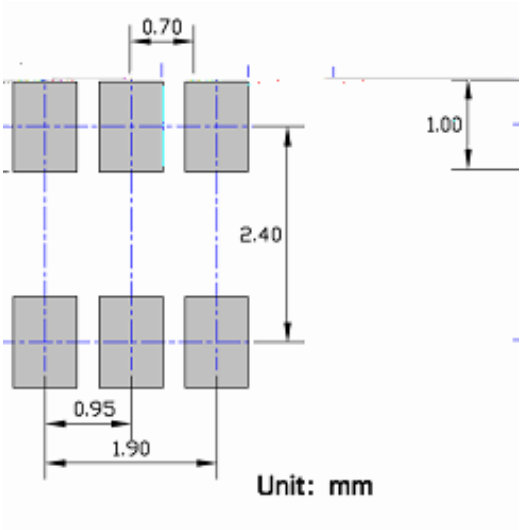
Prefered P/N	Packing Code	Unit weight(mg)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
BC856DS	F2	Approximate 15.6	3000	30000	120000	7” reel

■ Outline Dimensions



DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.012	0.020	0.300	0.500
B	0.059	0.067	1.500	1.700
C	0.104	0.116	2.650	2.950
D	0.037BSC		0.950BSC	
G	0.075BSC		1.900BSC	
H	0.111	0.119	2.820	3.020
J	0.000	0.100	0.000	0.080
K	1.050	1.150	0.041	0.044
L	0.300	0.500	0.012	0.020
M	0.100	0.200	0.004	0.008

■ Suggested Pad Layout



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