Darlington

2SB1383



Silicon PNP Epitaxial Planar Transistor (Complement to type 2SD2083)

Application: Chopper Regulator, DC Motor Driver and General Purpose

Absolute maximum ratings (Ta=25°C)								
Symbol	2SB1383	Unit						
Vсво	-120	V						
VCEO	-120	V						
VEBO	-6	V						
Ic	-25(Pulse-40)	А						
Ів	-2	А						
Pc	120(Tc=25°C)	W						
Tj	150	°C						
Tstg	-55 to +150	°C						

Electrical	Characteristics	(Ta=25°C)		
Symbol	Conditions	2SB1383	Unit	
Ісво	Vcb=-120V	-10max	μΑ	
І ЕВО	VEB=-6V	-10max	mA	
V(BR)CEO	Ic=-25mA	-120min	V	
hfe	Vce=-4V, Ic=-12A	2000min		
Vce(sat)	Ic=-12A, IB=-24mA	-1.8max	V	
VBE(sat)	Ic=-12A, IB=-24mA	-2.5max	V	
fr	Vce=-12V, Ie=1A	50typ	MHz	
Сов	VcB=-10V, f=1MHz	230typ	pF	

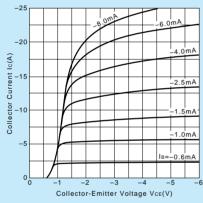
Weight: Approx 6.0g

External Dimensions MT-100(TO3P)

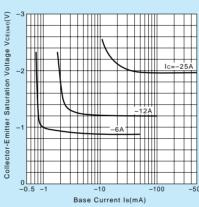
■Typical Switching Characteristics (Common Emitter)

Vcc	R _L	Ic	V _{BB1} (V)	V _{BB2}	I _{B1}	I _{B2}	ton	tstg	tf
(V)	(Ω)	(A)		(V)	(mA)	(mA)	(µs)	(µs)	(µs)
-24	2	-12	-10	5	-24	24	1.0typ	3.0typ	1.0typ



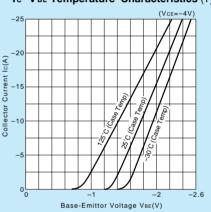


VcE(sat)-IB Characteristics (Typical)

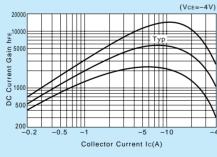


Ic-VBE Temperature Characteristics (Typical)

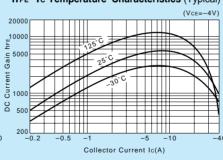
a. Type No. b. Lot No.



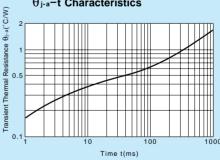
hfe-Ic Characteristics (Typical)



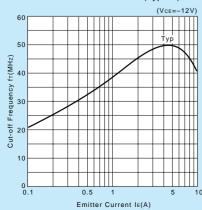
hfe-Ic Temperature Characteristics (Typical)



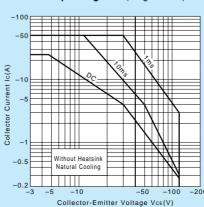
θ_{i-a}-t Characteristics



fT-IE Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

