

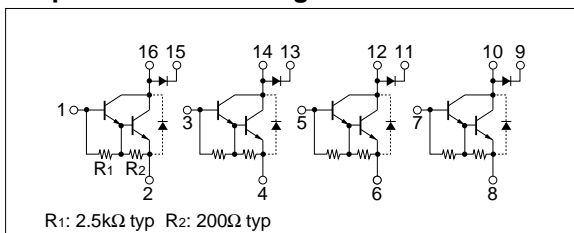
Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	120	V
V _{CEO}	100	V
V _{EBO}	6	V
I _C	1.5	A
I _{CP}	2.5 (PW≤1ms, Du≤10%)	A
I _B	0.2	A
I _F	1.5	A
I _{FSM}	2.5 (PW≤0.5ms, Du≤10%)	A
V _R	120	V
P _T	3 (Ta=25°C)	W
T _j	150	°C
T _{stg}	-40 to +150	°C

Electrical characteristics (Ta=25°C)

Symbol	Specification			Unit	Conditions
	min	typ	max		
I _{CBO}			10	μA	V _{CB} =120V
I _{EBO}			3	mA	V _{EB} =6V
V _{CEO}	100			V	I _C =10mA
h _{FE}	2000	6000	12000		V _{CE} =4V, I _C =1A
V _{CE(sat)}		1.1	1.3	V	I _C =1A, I _B =2mA
V _{BE(sat)}		1.7	2.2	V	
t _{on}		0.5		μs	V _{CC} ≐30V, I _C =1A,
t _{stg}		4.5		μs	
t _f		1.2		μs	I _{B1} =-I _{B2} =2mA
f _T		50		MHz	V _{CE} =12V, I _E =-0.1A
C _{ob}		20		pF	V _{CB} =10V, f=1MHz

Equivalent circuit diagram

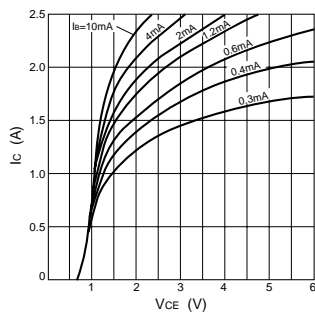


Diode for flyback voltage absorption (Ta=25°C)

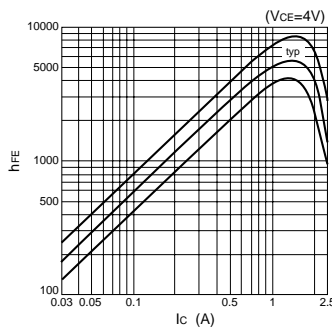
Symbol	Specification			Unit	Conditions
	min	typ	max		
V _R	120			V	I _R =10μA
V _F			1.6	V	I _F =1A
I _R			10	μA	V _R =120V
t _{rr}		100		ns	I _F =±100mA

Characteristic curves

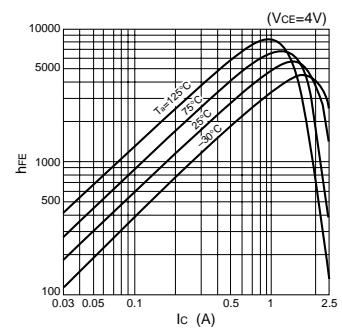
I_C-V_{CE} Characteristics (Typical)



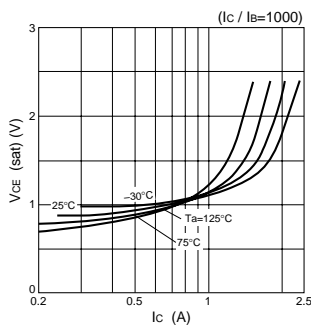
h_{FE}-I_C Characteristics (Typical)



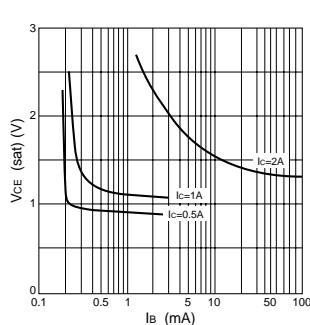
h_{FE}-I_C Temperature Characteristics (Typical)



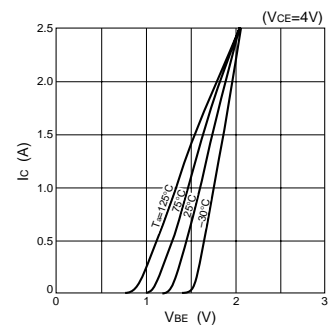
V_{CE(sat)}-I_C Temperature Characteristics (Typical)



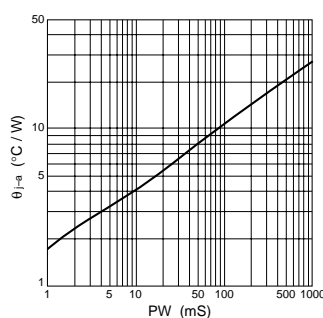
V_{CE(sat)}-I_B Characteristics (Typical)



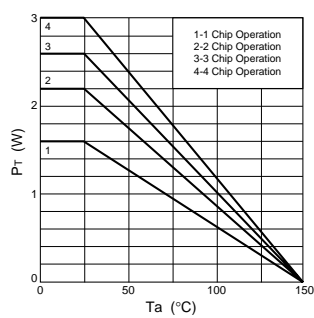
I_C-V_{BE} Temperature Characteristics (Typical)



θ_{J-a}-PW Characteristics



P_T-T_a Characteristics



Safe Operating Area (SOA)

