

High Voltage Switch Mode Application

High Speed Switching

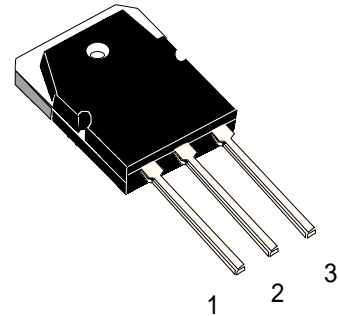
Suitable for Switching Regulator and Motor Control

**ABSOLUTE MAXIMUM RATINGS**

(Ta=25 )

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	VCBO	700	V
Collector-Emitter Voltage	VCEO	400	V
Emitter-Base voltage	VEBO	9	V
Collector Current	IC	12	A
Base Current	IB	6	A
Collector Power Dissipation	PC	130	W
Junction Temperature	Tj	150	
Storage Temperature	Tstg	-65~+150	

TO-3P



- 1. Base
- 2. Collector
- 3. Emitter

**ELECTRICAL CHARACTERISTICS**

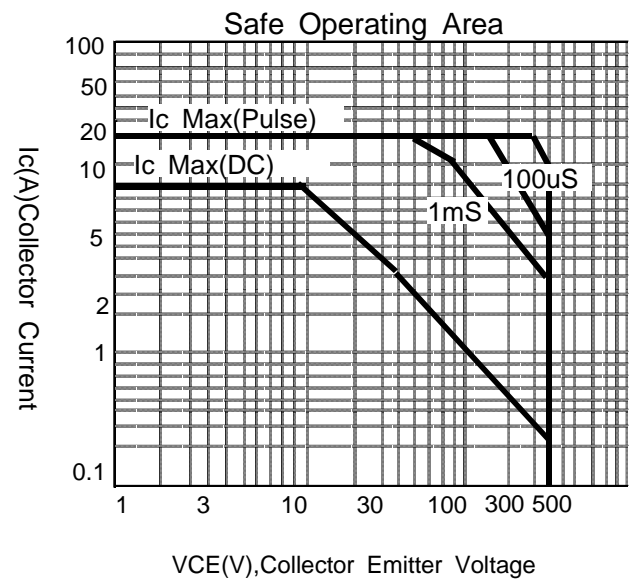
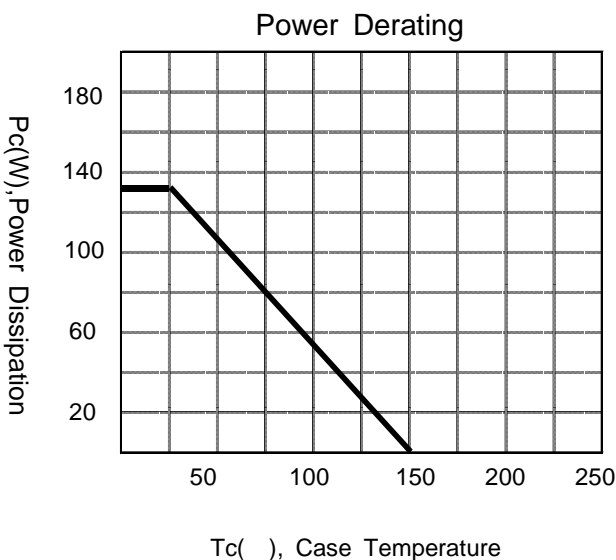
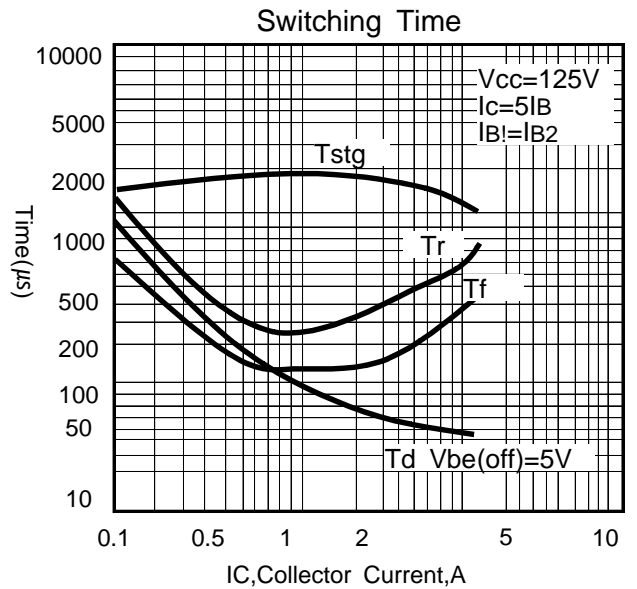
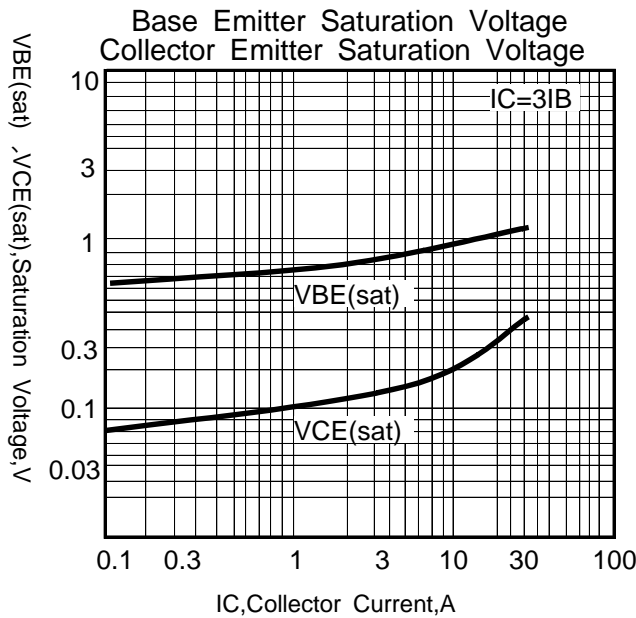
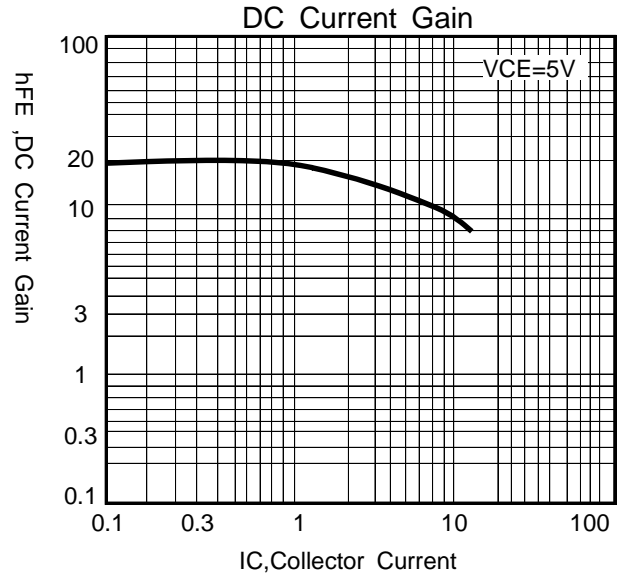
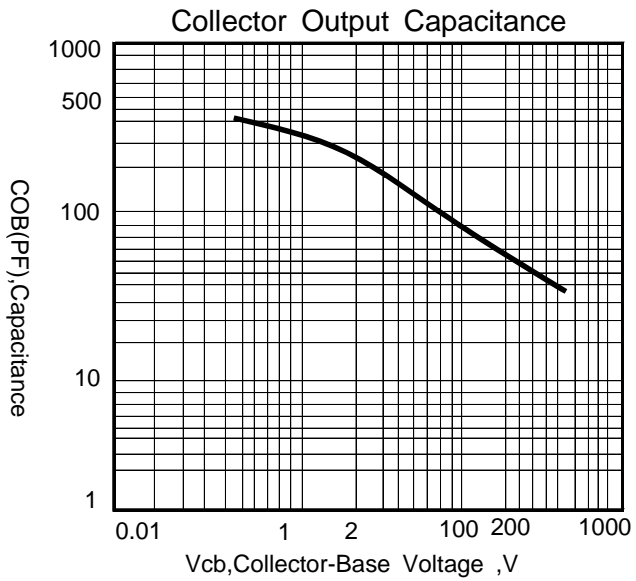
(Ta=25 , unless otherwise specified)

Characteristic	Symbol	Test Condition	Min	TYP	MAX	Unit
*Collector-emitter Sustaining voltage	BVCEO(sus)	IC=10mA ,IB=0	400			V
Emitter cut-off current	IEBO	VEB= 9V ,IC=0			1	mA
*DC current gain	#hFE(1) hFE(1)	VCE=5V , IC=5A VCE=5V , IC=8A	8 5		40 30	
*Collector-emitter saturation voltage	VCE(sat)	IC=5A, IB=1A IC=8A, IB=1.6A IC=12A, IB=3A			1 1.5 3	V
*Base-emitter saturation voltage	VBE(sat)	IC=5A, IB=1A IC=8A, IB=1.6A			1.2 1.6	V
Output Capacitance	COB	VCB=10V,,f=0.1MHZ			2.0	V
Current Gain Bandwidth Product	fT	VCE=10V, IC=0.5A	4.0			MHZ
Turn On Time	ton	VCC=125V,IC=8A IB1=-IB2=1.6A			1.1	μ S
Storage Time	ts				3	μ S
Fall Time	tf				0.7	μ S

\* Pulse test:PW 300us,Duty cycle 2%

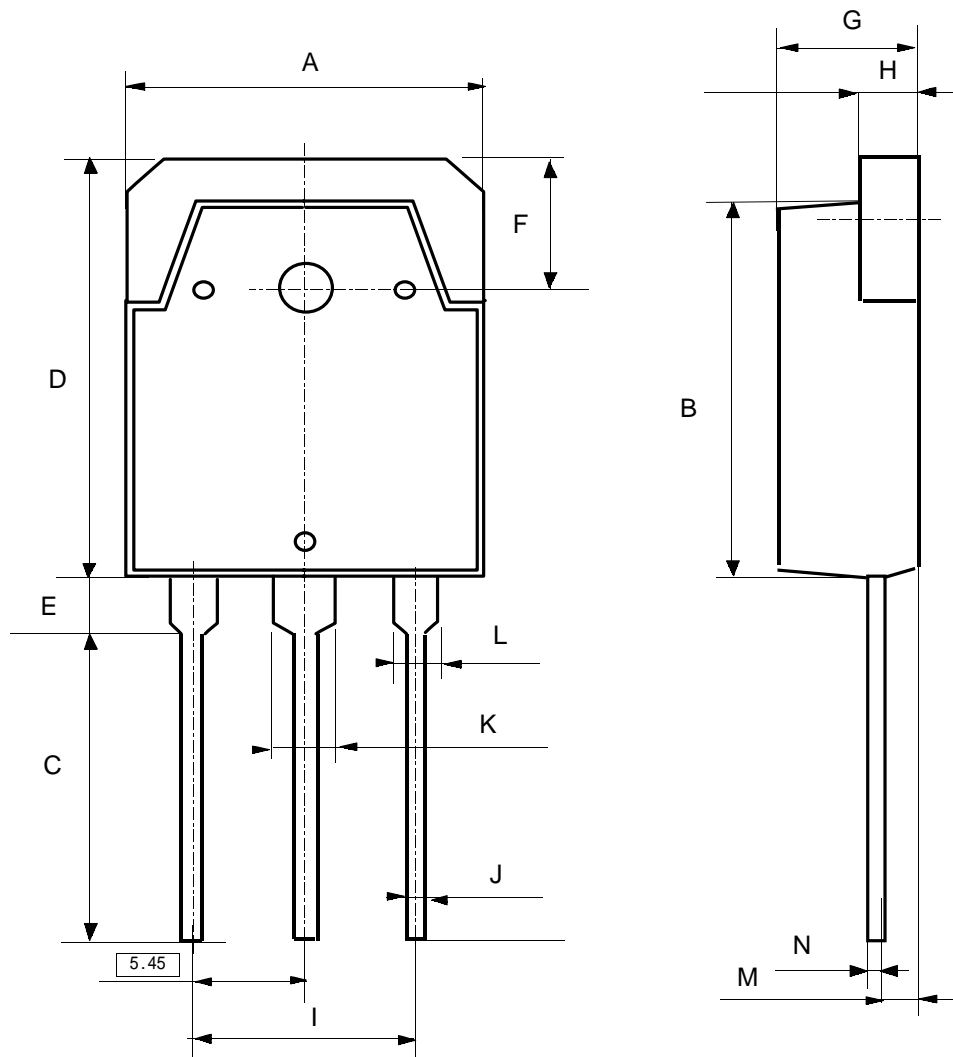
# hFE(1) Classification

Classification	H1	H2	H3	H4
hFE	15~20	18~27	25~32	30~35



Package Dimension

[TO-3P]



Package Dimension(unit:mm)							
Symbol	Min	Typ	Max	Symbol	Min	Typ	Max
A	15.60	15.80	16.00	H	2.00	2.05	2.15
B	17.80	18.00	18.20	I		10.90	
C	16.20	16.50	16.80	J	0.90	1.00	1.10
D			23.50	K	2.90	3.00	3.10
E	3.30	3.50	3.70	L	1.90	2.00	2.10
F	5.56	5.66	5.76	M	1.45	1.55	1.65
G	4.60	4.80	5.00	N	0.45	0.50	0.60