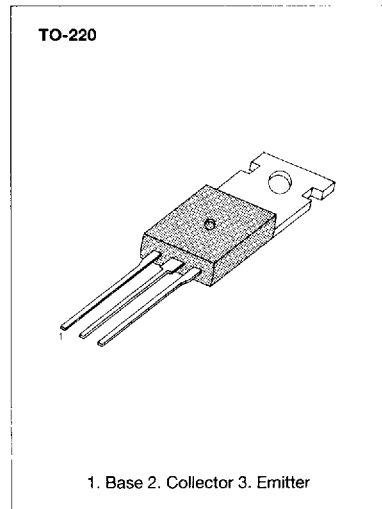


**HIGH VOLTAGE POWER SWITCH
SWITCHING APPLICATION**

- High speed Switching
- Wide SOA

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	1000	V
Collector-Emitter Voltage	V _{CE0}	450	V
Emitter-Base Voltage	V _{EB0}	9	V
Collector Current(DC)	I _c	5	A
Collector Current(pulse)	I _c	10	A
Base Current(DC)	I _b	2	A
Base Current(Pulse)	I _b	4	A
Collector Dissipation (T _c =25°C)	P _c	100	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-65~150	°C

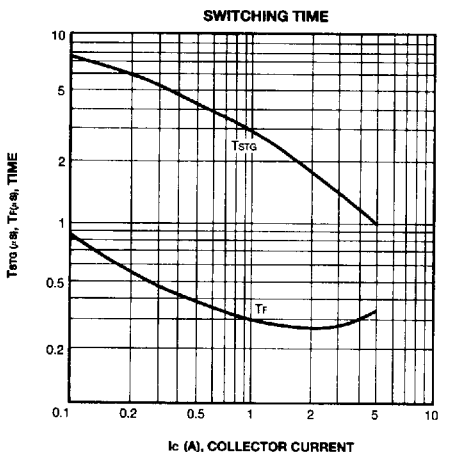
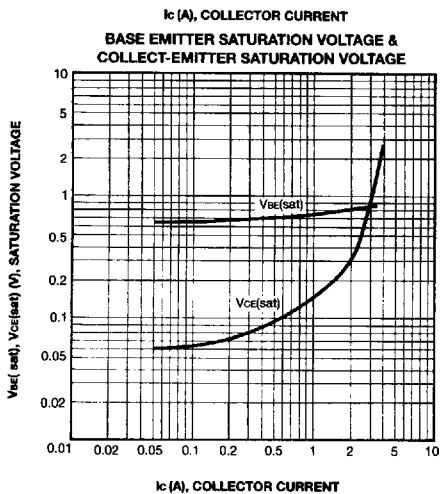
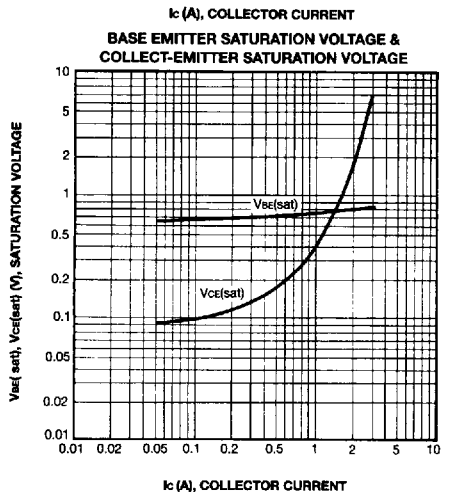
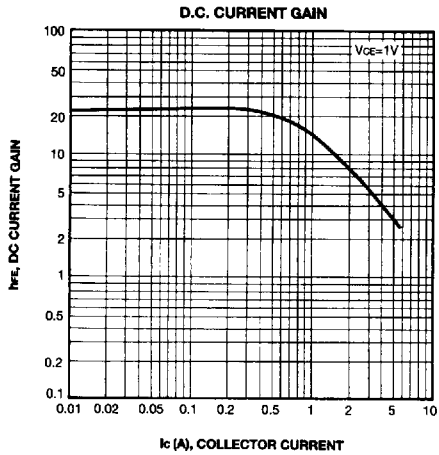
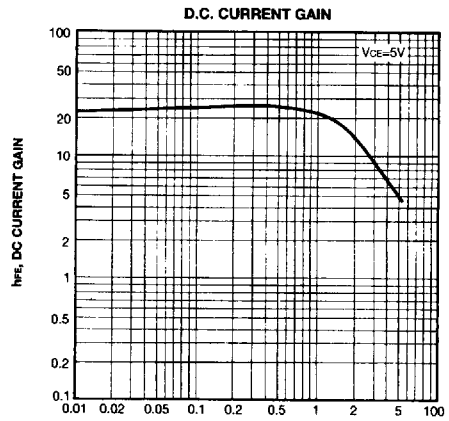
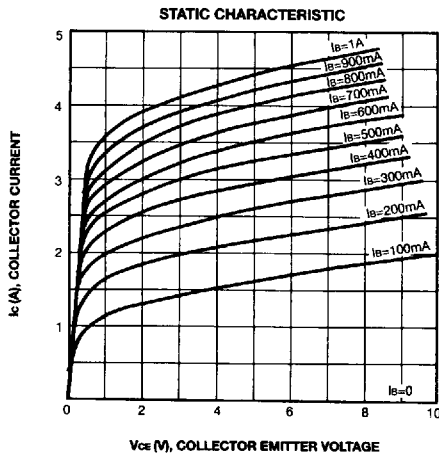


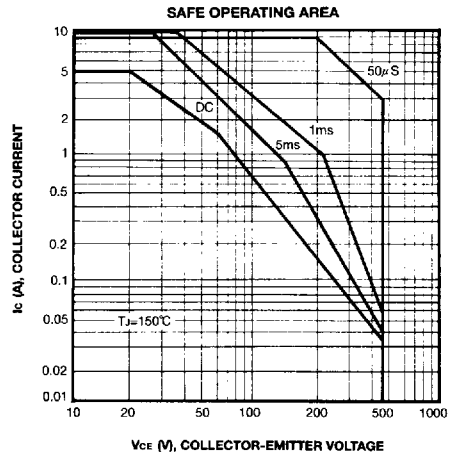
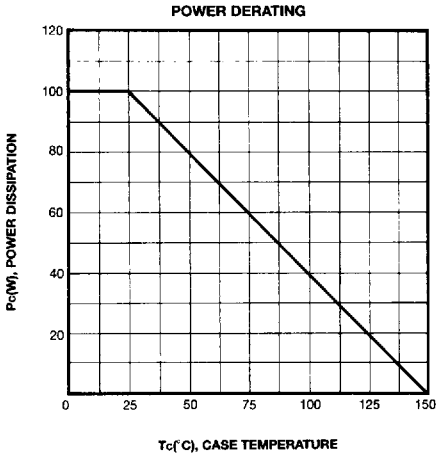
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ELECTRICAL CHARACTERISTICS (T_c=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Base Breakdown Voltage	BV _{CB0}	I _c =1mA, I _E =0	700			V
Collector Emitter Breakdown Voltage	BV _{CE0}	I _c =5mA, I _B =0	400			V
Emitter Base Breakdown Voltage	BV _{EB0}	I _c =1mA, I _E =0	9		10	V
Collector Cutoff Current	I _{CB0}	V _{CB} =800, V _{BE} =0			10	μA
Emitter Cutoff Current	I _{EB0}	V _{EB} =9V, I _c =0				μA
DC Current Gain	h _{FE1}	V _{CE} =5V, I _c =0.5A	15		30	
	h _{FE2}	V _{CE} =1V, I _c =2A	6			
Collector Emitter Saturation Voltage	V _{CE(sat)}	I _c =1A, I _B =0.1A		0.55	0.8	V
		I _c =2A, I _B =0.4A			0.5	V
Base Emitter Saturation Voltage	V _{BE(sat)}	I _c =1A, I _B =0.1A			1.1	V
		I _c =2A, I _B =0.4A			1.25	V
Output Capacitance	C _{OB}	V _{CB} =10V, f=0.1MHz		70		pF
Input Capacitance	C _{IB}	V _{EB} =8V, I _c =0, f=0.1MHz		1000		pF
Current Gain Bandwidth Product	f _T	V _{CE} =6V, I _c =0.1A		14		MHz
Turn on time	t _{ON}	V _{CC} =125V,			200	ns
Storage time	t _{STG}	I _c =1A			2	μS
Fall Time	t _F	I _{B1} =0.2A, I _{B2} =-0.2A			500	ns

* Pulse Test : Pulse Width=5ms, Duty Cycle ≤ 10%





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