



APPLICATIONS

High Voltage And High Reliability .

ABSOLUTE MAXIMUM RATINGS ($T_a=25$)

T_{stg} ——Storage Temperature..... -55~150

T_j ——Junction Temperature.....150

P_C ——Collector Dissipation($T_c=25$).....65W

V_{CBO} ——Collector-Base Voltage.....1100V

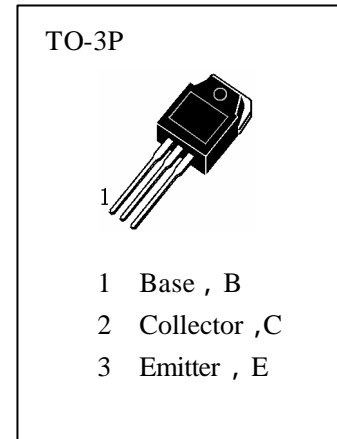
V_{CEO} ——Collector-Emitter Voltage.....800V

V_{EBO} ——Emitter-Base Voltage.....7V

I_C ——Collector Current (DC)3A

I_{CP} ——Collector Current(Pulse).....10A

I_b ——Base Current.....1.5A



ELECTRICAL CHARACTERISTICS ($T_a=25$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCBO	Collector-Base Breakdown Voltage	1100			V	$I_C=1mA, I_E=0$
BVCEO	Collector-Emitter Breakdown Voltage	800			V	$I_C=5mA, I_B=0$
VEBO	Emitter-Base Breakdown Voltage	7			V	$I_E=1mA, I_C=0$
ICBO	Collector Cut-off Current			10	μA	$V_{CB}=800V, I_E=0$
IEBO	Emitter Cut-off Current			10	μA	$V_{EB}=5V, I_C=0$
HFE (1)	DC Current Gain	10		40		$V_{CE}=5V, I_C=0.2A$
HFE (2)	DC Current Gain	8				$V_{CE}=5V, I_C=1A$
VCE(sat)	Collector- Emitter Saturation Voltage			2	V	$I_C=1.5A, I_B=0.3A$
VBE(sat)	Base-Emitter Saturation Voltage			1.5	V	$I_C=1.5A, I_B=0.3A$
ft	Current Gain-Bandwidth Product		15		MHz	$V_{CE}=10V, I_C=0.2A$
Cob	Output Capacitance		60		pF	$V_{CB}=10V, I_E=0, f=1MHz$

hFE Classification

N	R	O
10—20	15—30	20—40

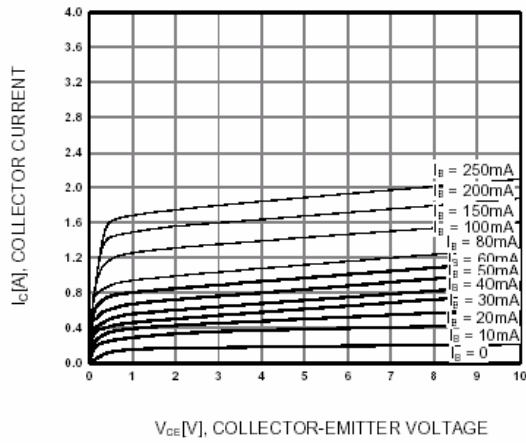


Figure 1. Static Characteristic

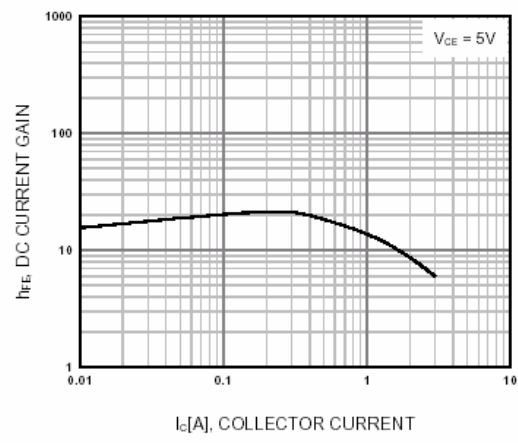


Figure 2. DC current Gain

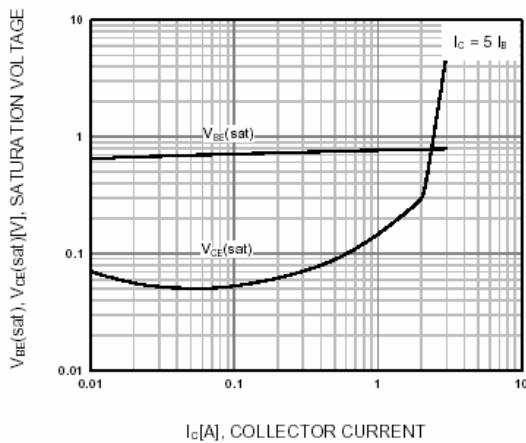


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

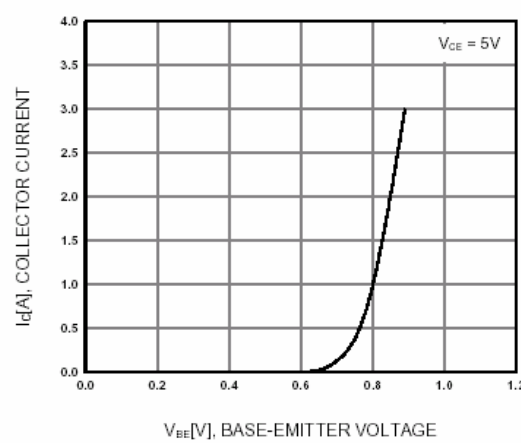


Figure 4. Base-Emitter On Voltage

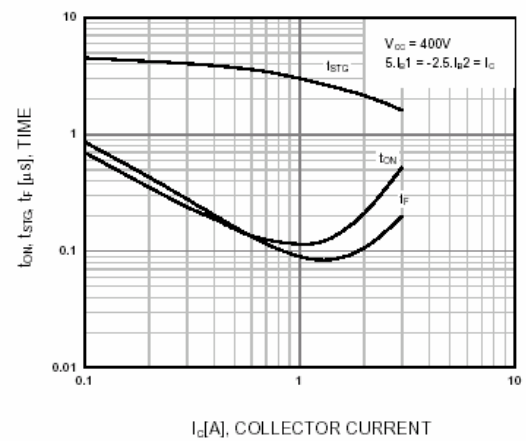


Figure 5. Switching Time

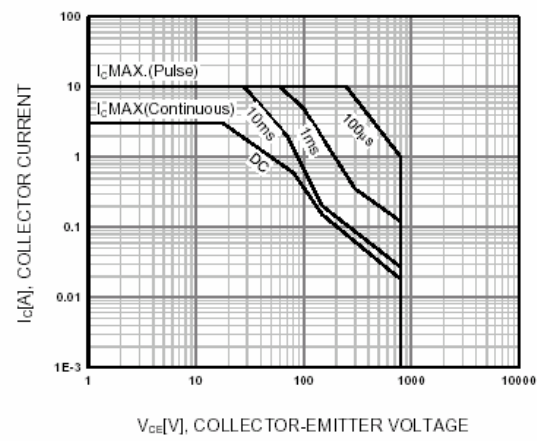


Figure 6. Safe Operating Area

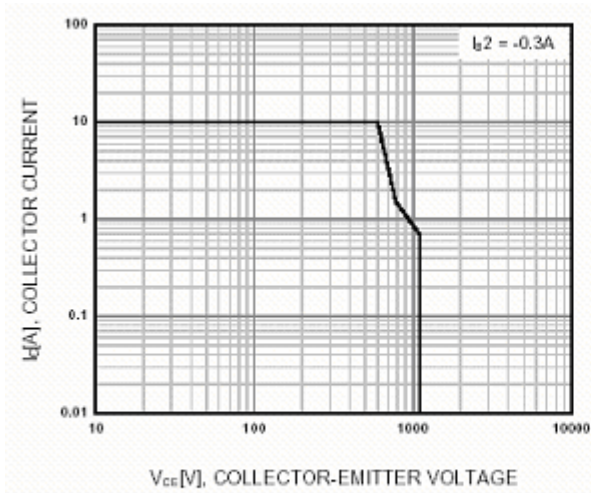


Figure 7. Reverse Bias Operating Area

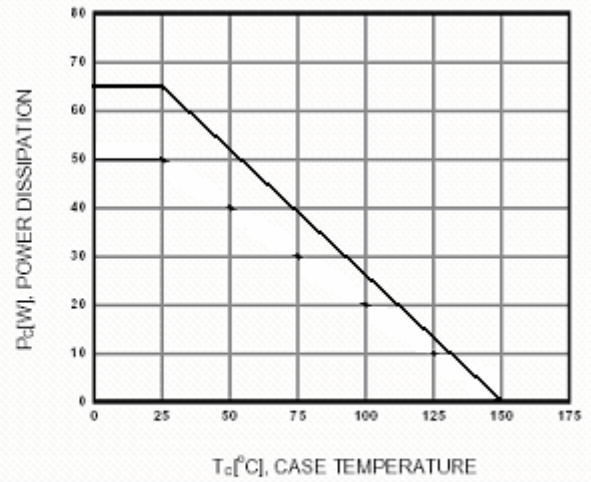


Figure 8. Power Derating