

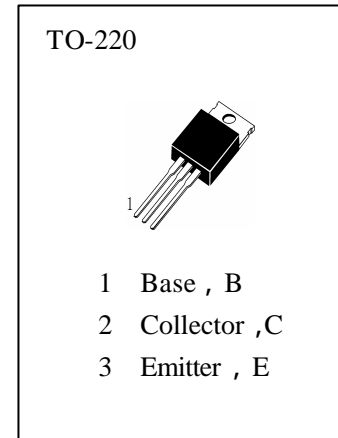


APPLICATIONS

high Voltage high-Speed Switching.

ABSOLUTE MAXIMUM RATINGS ($T_a=25$)

T_{stg} —Storage Temperature.....	-55~150
T_j —Junction Temperature.....	150
P_C —Collector Dissipation($T_c=25$).....	75W
V_{CBO} —Collector-Base Voltage.....	700V
V_{CEO} —Collector-Emitter Voltage.....	400V
V_{EBO} —Emitter-Base Voltage.....	9V
I_C —Collector Current (DC)	4A
I_C —Collector Current (Pulse)	8A
I_b —Base Current.....	2mA



ELECTRICAL CHARACTERISTICS ($T_a=25$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CEO}	Collector-Emitter Breakdown Voltage	400			V	$I_C=10mA, I_B=0$
I_{EBO}	Emitter Cut-off Current			1.0	mA	$V_{EB}=9V, I_C=0$
$H_{FE} (1)$	DC Current Gain	10		40		$V_{CE}=5V, I_C=1A$
$H_{FE} (2)$		8		40		$V_{CE}=5V, I_C=2A$
$V_{CE(sat1)}$	Collector- Emitter Saturation Voltage			0.5	V	$I_C=1A, I_B=0.2A$
$V_{CE(sat2)}$	Collector- Emitter Saturation Voltage			0.6	V	$I_C=2A, I_B=0.5A$
$V_{CE(sat3)}$	Collector- Emitter Saturation Voltage			1	V	$I_C=4A, I_B=1A$
$V_{BE(sat1)}$	Base-Emitter Saturation Voltage			1.2	V	$I_C=1A, I_B=0.2A$
$V_{BE(sat2)}$	Base-Emitter Saturation Voltage			1.6	V	$I_C=2A, I_B=0.5A$
C_{ob}	Output Capacitance		65		pF	$V_{CB}=10V, I_E=0, f=0.1MHz$
f_r	Current Gain-Bandwidth Product	4			MHz	$V_{CE}=10V, I_C=0.5A$
t_{ON}	Turn-On Time			0.8	μS	} $V_{CC}=125V, I_C=2A, I_{B1}=I_{B2}=0.4A$
t_{STG}	Storage Time			4	μS	
t_R	Rise Time			0.9	μS	

h_{FE} Classification

H1	H2	H3	H4	H5
10—16	14—21	19—26	24—31	29—40

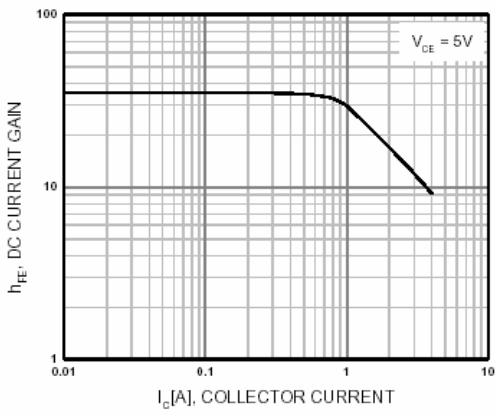


Figure 1. DC current Gain

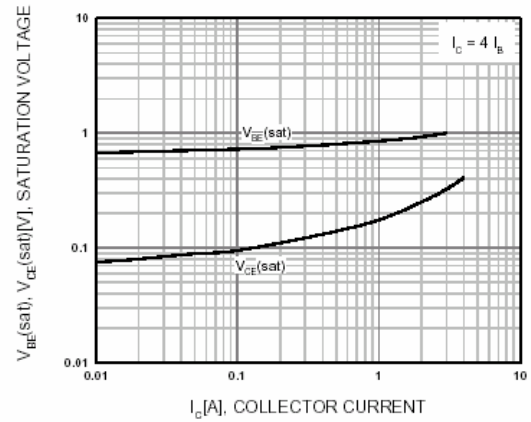


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

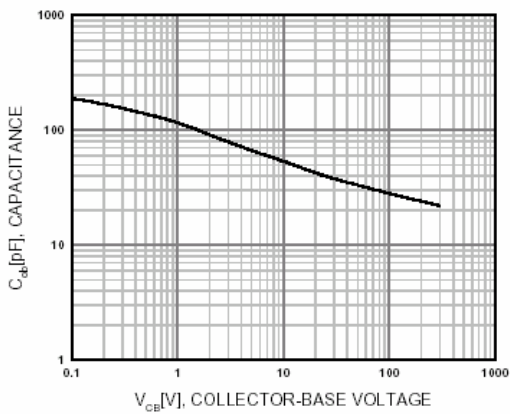


Figure 3. Collector Output Capacitance

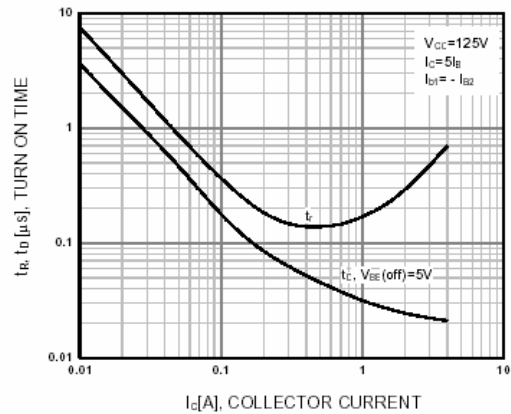


Figure 4. Turn On Time

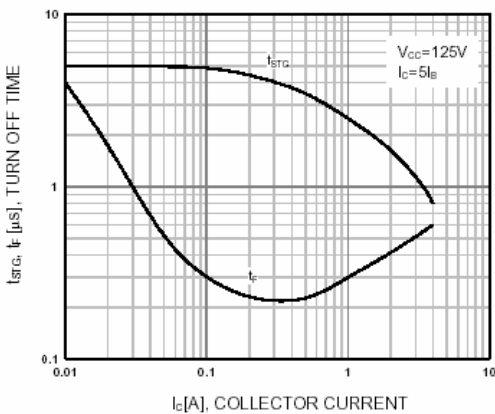


Figure 5. Turn Off Time

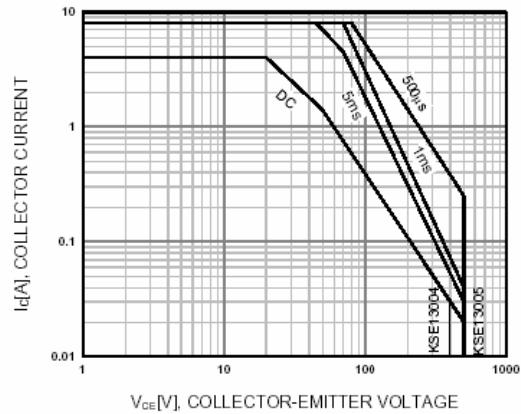


Figure 6. Safe Operating Area