

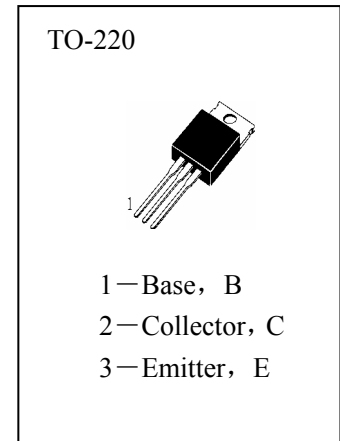


■ APPLICATIONS

High Voltage And High Reliability .

■ ABSOLUTE MAXIMUM RATINGS (  $T_a=25^{\circ}\text{C}$  )

- $T_{stg}$ ——Storage Temperature..... -55~150 $^{\circ}\text{C}$
- $T_j$ ——Junction Temperature..... 150 $^{\circ}\text{C}$
- $P_C$ ——Collector Dissipation( $T_c=25^{\circ}\text{C}$ ).....50W
- $V_{CBO}$ ——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 (  $T_a=25^{\circ}\text{C}$  )

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
$BV_{CBO}$	Collector-Base Breakdown Voltage	1100			V	$I_C=1\text{mA}, I_E=0$
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	800			V	$I_C=5\text{mA}, I_B=0$
$BV_{EBO}$	Emitter-Base Breakdown Voltage	7			V	$I_E=1\text{mA}, I_C=0$
$I_{CBO}$	Collector Cut-off Current			10	$\mu\text{A}$	$V_{CB}=800\text{V}, I_E=0$
$I_{EBO}$	Emitter Cut-off Current			10	$\mu\text{A}$	$V_{EB}=5\text{V}, I_C=0$
$H_{FE(1)}$	DC Current Gain	10		40		$V_{CE}=5\text{V}, I_C=0.2\text{A}$
$H_{FE(2)}$	DC Current Gain	8				$V_{CE}=5\text{V}, I_C=1\text{A}$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			2	V	$I_C=1.5\text{A}, I_B=0.3\text{A}$
$V_{BE(sat)}$	Base-Emitter Saturation Voltage			1.5	V	$I_C=1.5\text{A}, I_B=0.3\text{A}$
$f_T$	Current Gain-Bandwidth Product		15		MHz	$V_{CE}=10\text{V}, I_C=0.2\text{A}$
$C_{ob}$	Output Capacitance		60		pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$

■  $h_{FE}$  Classification

N	R	O
10—20	15—30	20—40

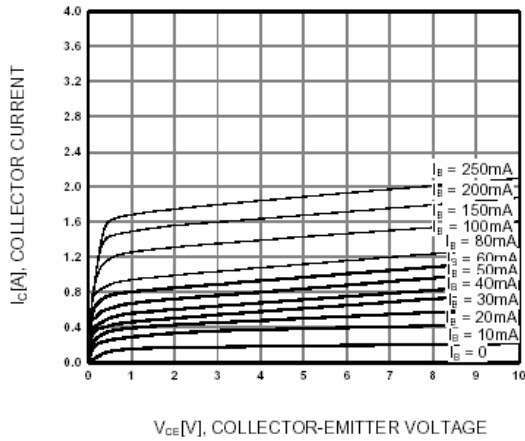
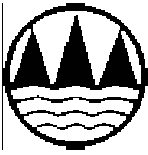


Figure 1. Static Characteristic

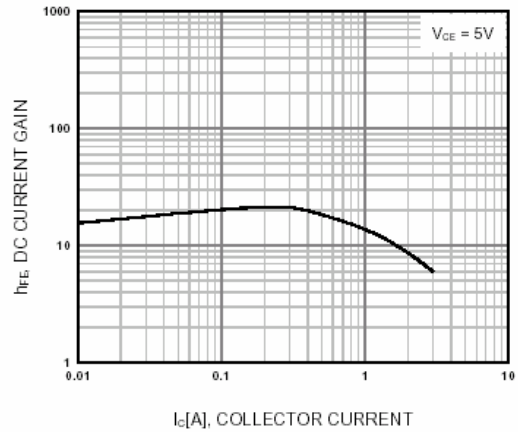


Figure 2. DC current Gain

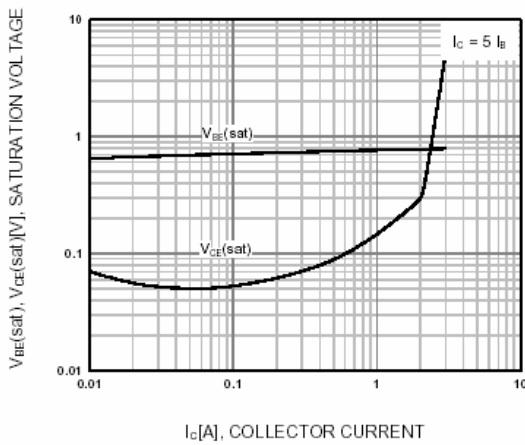


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

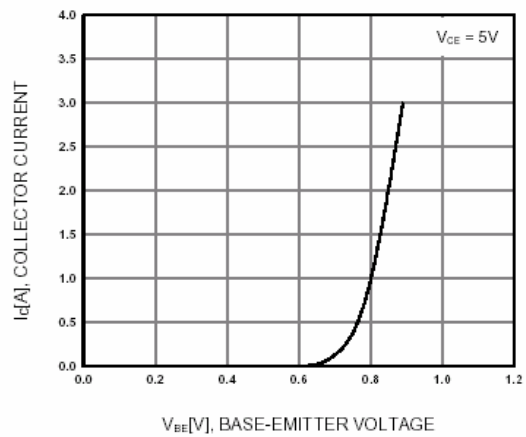


Figure 4. Base-Emitter On Voltage

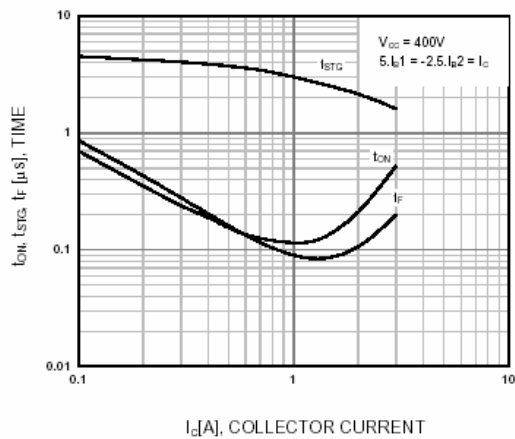


Figure 5. Switching Time

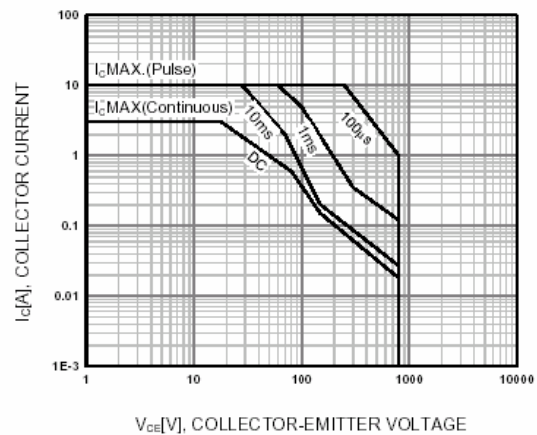


Figure 6. Safe Operating Area