

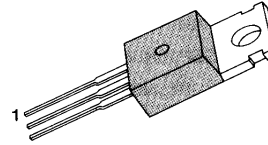
HIGH VOLTAGE AND HIGH RELIABILITY**HIGH SPEED SWITCHING: $t_F = 0.1\mu s$**

- WIDE SOA

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	800	V
Collector-Emitter Voltage	V_{CEO}	500	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current (DC)	I_C	5	A
Collector Current (Pulse)	I_C	10	A
Base Current	I_B	2	A
Collector Dissipation ($T_C=25^\circ C$)	P_C	50	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ C$

TO-220



1.Base 2.Collector 3.Emitter

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ C$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Base Breakdown Voltage	BV_{CBO}	$I_C = 1mA, I_E = 0$	800			V
Collector Emitter Breakdown Voltage	BV_{CEO}	$I_C = 5mA, R_{BE} = \infty$	500			V
Emitter Base Breakdown Voltage	BV_{EBO}	$I_E = 1mA, I_C = 0$	7			V
Collector Emitter Sustaining Voltage	$V_{CEX(S)}$	$I_C = 2.5A, I_{B1} = -I_{B2} = 1A$ $L = 1mH, \text{Clamped}$	500			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 500V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			10	μA
DC Current Gain	h_{FE1}	$V_{CE} = 5V, I_C = 0.6A$	15		50	
	h_{FE2}	$V_{CE} = 5V, I_C = 3A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 3A, I_B = 0.6A$			1	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 3A, I_B = 0.6A$			1.5	V
Collector Output Capacitance	C_{OB}	$V_{CB} = 10V, f = 1MHz$		80		pF
Current Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 0.6A$		18		MHz
Turn On Time	t_{ON}	$V_{CC} = 200V$			0.5	μs
Storage Time	t_{STG}	$5 \cdot I_{B1} = -2.5 \cdot I_{B2} = I_C = 4A$			3	μs
Fall Time	t_F	$R_L = 50\Omega$			0.3	μs

 $h_{FE}(1)$ CLASSIFICATION

Classification	R	O	Y
h_{FE1}	15 ~ 30	20 ~ 40	30 ~ 50

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