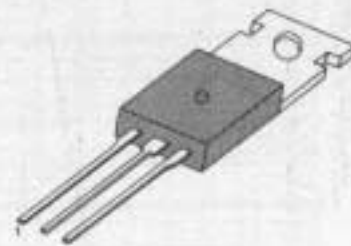


HIGH VOLTAGE, HIGH QUALITY

HIGH SPEED SWITCHING: $t_r=0.1\mu s$ ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	800	V
Collector-Emitter Voltage	V_{CE0}	500	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current (DC)	I_C	3	A
Collector Current (Pulse)	I_C	6	A
Base Current (DC)	I_B	1	A
Collector Dissipation	P_C	40	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 ($T_a=25^\circ C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Base Breakdown Voltage	BV_{CB0}	$I_C=1mA, I_E=0$	800			V
Collector Emitter Breakdown Voltage	BV_{CE0}	$I_C=5mA, R_{BE}=\infty$	500			V
Emitter Base Breakdown Voltage	BV_{EB0}	$I_E=1mA, I_C=0$	7			V
Collector Emitter Sustaining Voltage	$V_{CEX(sus)}$	$I_C=1.5A, I_B1=I_B2=0.6A$ $L=2mH, \text{Clamped}$	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}	$V_{CE}=5V, I_C=0.3A$	15		50	
	h_{FE2}	$V_{CE}=5V, I_C=1.5A$	8			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.5A, I_B=0.3A$			1	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1.5A, I_B=0.3A$			1.5	V
Output Capacitance	C_{OE}	$V_{CB}=10V, f=1MHz$		50		pF
Current Gain Bandwidth Product	f_T	$V_{CE}=10V, I_C=0.3A$		18		MHz
Turn On Time	t_{on}	$V_{CC}=200V$			0.5	μs
Storage Time	t_s	$5I_B1=2.5 I_B2=I_C=2A$			3	μs
Fall Time	t_f	$RL=100ohm$			0.3	μs

 h_{FE} CLASSIFICATION

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