

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 1700\text{ V}, I_E = 0$	—	—	1	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{ V}, I_C = 0$	83	—	250	mA
Emitter-Base Breakdown Voltage	V_{EBO}	$I_E = 400\text{ mA}, I_C = 0$	5	—	—	V
DC Current Gain	$h_{FE}(1)$	$V_{CE} = 5\text{ V}, I_C = 1\text{ A}$	8	—	25	
	$h_{FE}(2)$	$V_{CE} = 5\text{ V}, I_C = 6\text{ A}$	4	—	8.5	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6\text{ A}, I_B = 1.5\text{ A}$	—	—	3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 6\text{ A}, I_B = 1.5\text{ A}$	—	0.9	1.2	V
Forward Voltage (Damper Diode)	$-V_F$	$I_F = 6\text{ A}$	—	1.45	1.8	V
Transition Frequency	f_T	$V_{CE} = 10\text{ V}, I_E = 0.1\text{ A}$	—	2	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	185	—	pF
Switching Time	Storage Time	$I_{CP} = 5\text{ A}, I_{B1}(\text{end}) = 1.0\text{ A}$ $f_H = 31.5\text{ kHz}$	—	4	6	μs
	Fall Time		—	0.2	0.5	



