

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = 1500 \text{ V}, I_E = 0$	—	—	1	mA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = 5 \text{ V}, I_C = 0$	66	—	200	mA
Emitter-Base Breakdown Voltage		V_{EBO}	$I_E = 300 \text{ mA}, I_C = 0$	5	—	—	V
DC Current Gain		h_{FE}	$V_{CE} = 5 \text{ V}, I_C = 0.5 \text{ A}$	8	—	25	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = 3 \text{ A}, I_B = 0.8 \text{ A}$	—	5	8	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = 3 \text{ A}, I_B = 0.8 \text{ A}$	—	0.9	1.5	V
Forward Voltage (Damper Diode)		$-V_F$	$I_F = 3.5 \text{ A}$	—	1.5	2.0	V
Transition Frequency		f_T	$V_{CE} = 10 \text{ V}, I_C = 0.1 \text{ A}$	—	3	—	MHz
Collector Output Capacitance		C_{ob}	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	—	55	—	pF
Switching Time	Storage Time	t_{stg}	$I_{CP} = 3 \text{ A}, I_{B1}(\text{end}) = 0.8 \text{ A}, f_H = 15.75 \text{ kHz}$	—	7.5	10	μs
	Fall Time	t_f		—	0.5	1.0	



