

ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

PARAMETER		Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Base Cut-Off Current	$V_{CB} = 120V$ $I_E = 0$			1	mA
I_{CER}	Collector Emitter Cut-Off Current	$V_{CE} = 80V$ $T_C = 100^{\circ}C$ $R_{BE} = 10\Omega$			10	
I_{EBO}	Emitter Base Cut-Off Current	$V_{EB} = 10V$ $I_C = 0A$			0.5	
$V_{CEO(sus)*}$	Collector Emitter Sustaining Voltage	$I_C = 100mA$	125			V
$V_{(BR)CBO*}$	Collector Base Breakdown Voltage	$I_C = 5mA$	160			
$V_{(BR)EBO*}$	Base Emitter Breakdown Voltage	$I_E = 5mA$	10			
$V_{CE(sat)*}$	Collector Emitter Saturation Voltage	$I_C = 10A$ $I_B = 1A$		0.5	1.4	
$V_{BE(sat)*}$	Base Emitter Saturation Voltage	$I_C = 10A$ $I_B = 1A$		1.4	2.0	
h_{FE}	DC Current Gain	$I_C = 10A$ $V_{CE} = 4V$ $I_C = 20A$ $V_{CE} = 4V$ $T_C = -30^{\circ}C$ $I_C = 10A$ $V_{CE} = 4V$	20 10	15	60	—
f_T	Transition Frequency	$I_C = 1A$ $V_{CE} = 15V$ $f = 10MHz$	7			MHz
t_{on}	Turn On Time	$I_C = 15A$ $I_{B1} = 1.5A$			1	μS
t_{off}	Turn Off Time	$I_C = 15A$ $I_{B1} = -I_{B2} = 1.5A$			2	

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.