

The Characteristics Comparison with a BJT and a MOSFET

Table 1: The IGBT Characteristics Comparison with BJT, MOSFET

Features	BJT	MOSFET	IGBT
Drive Method	Current	Voltage	Voltage
Drive Circuit	Complex	Simple	Simple
Input Impedance	Low	High	High
Drive Power	High	Low	Low
Switching Speed	Slow (μs)	Fast (ns)	Middle
Operating Frequency	Low (less than 100kHz)	Fast (less than 1MHz)	Middle
S.O.A.	Narrow	Wide	Wide
Saturation Voltage	Low	High	Low