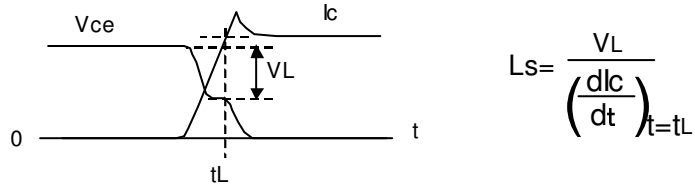
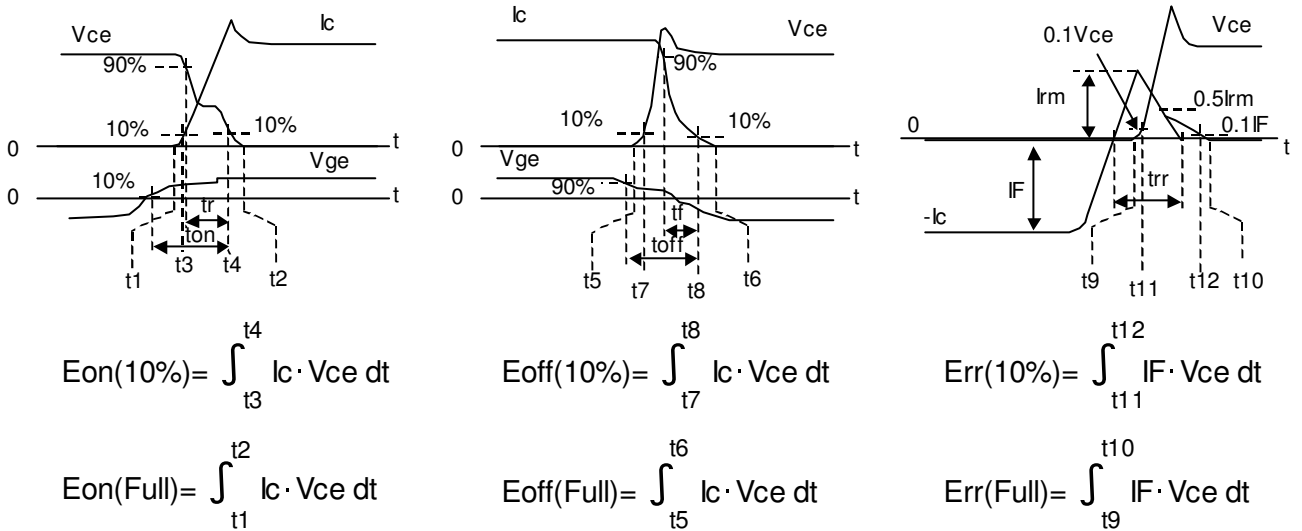


**Fig.1 Switching test circuit**

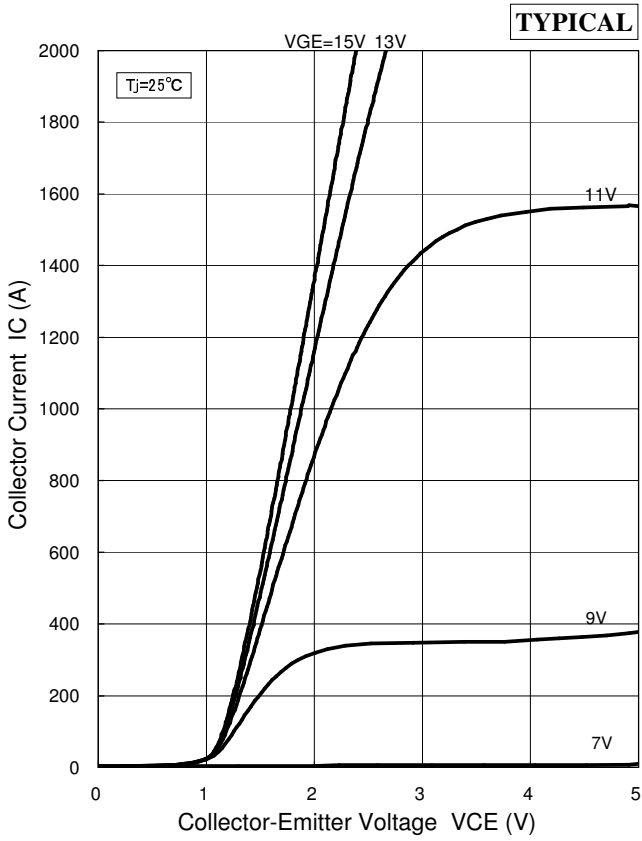


**Fig.2 Definition of Ls**

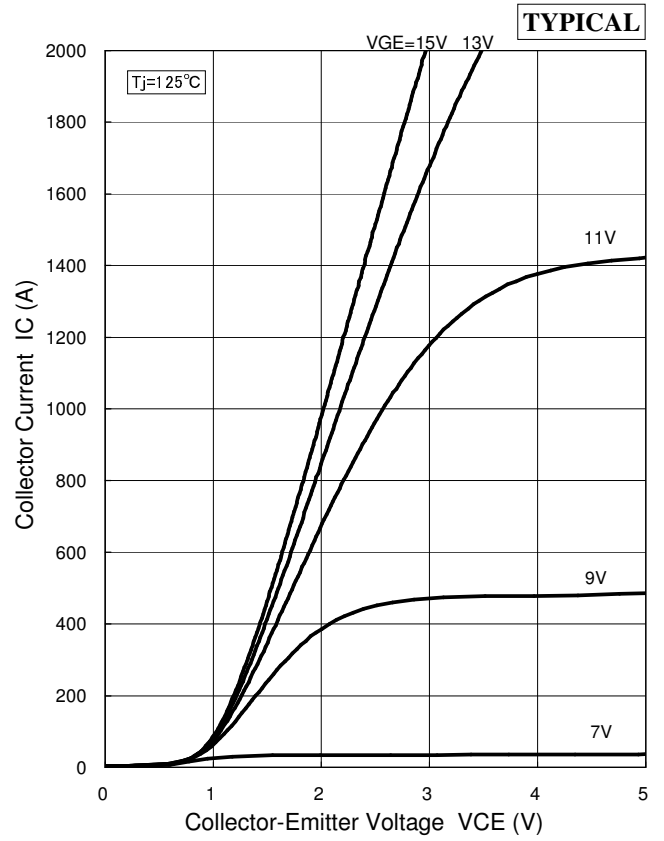


**Fig.3 Definition of switching loss**

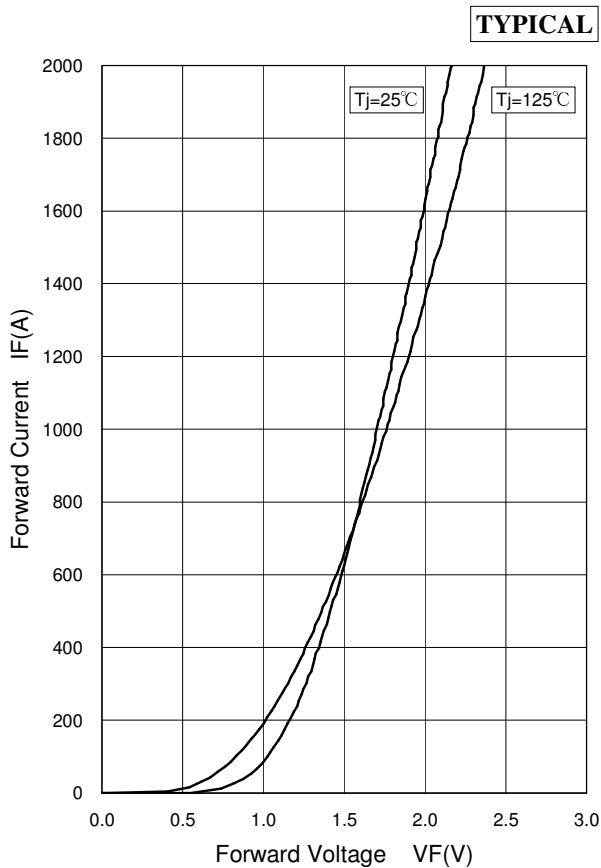
**STATIC CHARACTERISTICS**



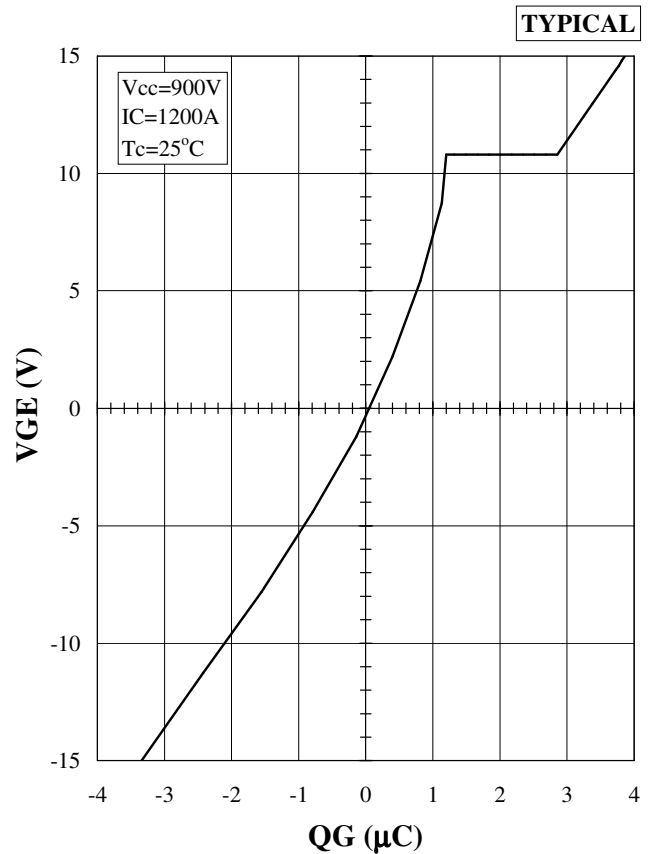
**Collector Current vs. Collector to Emmitter Voltage**



**Collector Current vs. Collector to Emmitter Voltage**

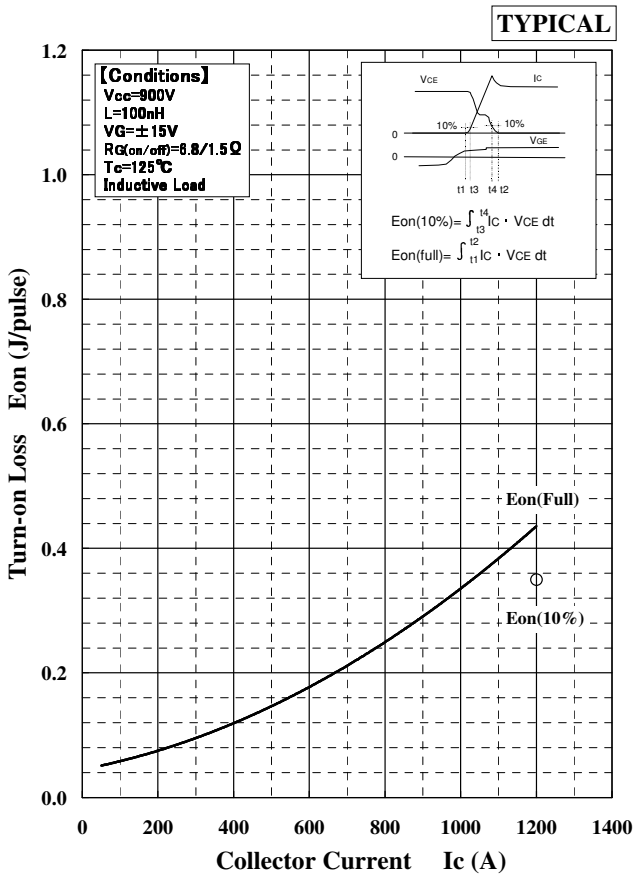


**Forward Voltage of free-wheeling diode**

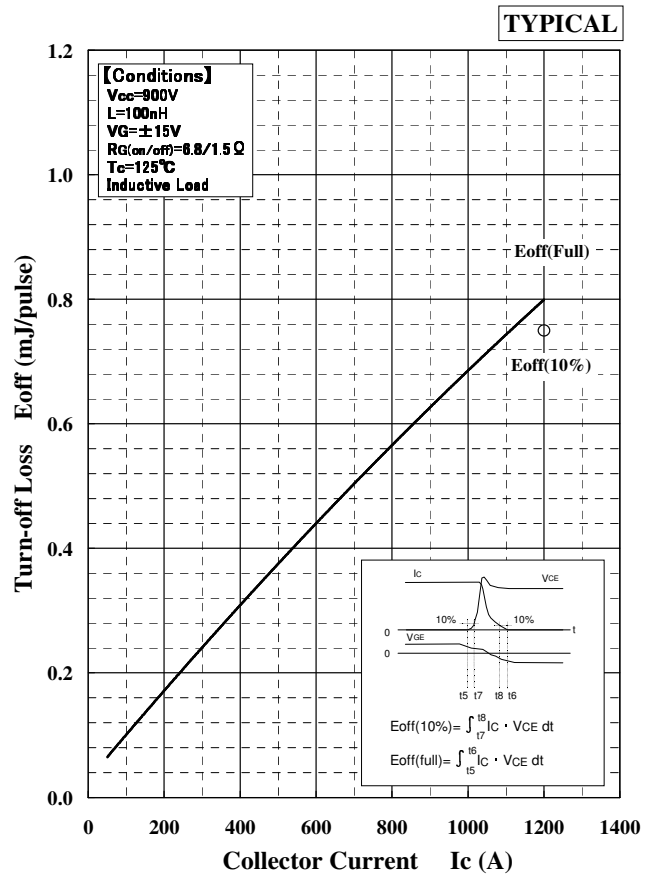


**QG-VGE curve**

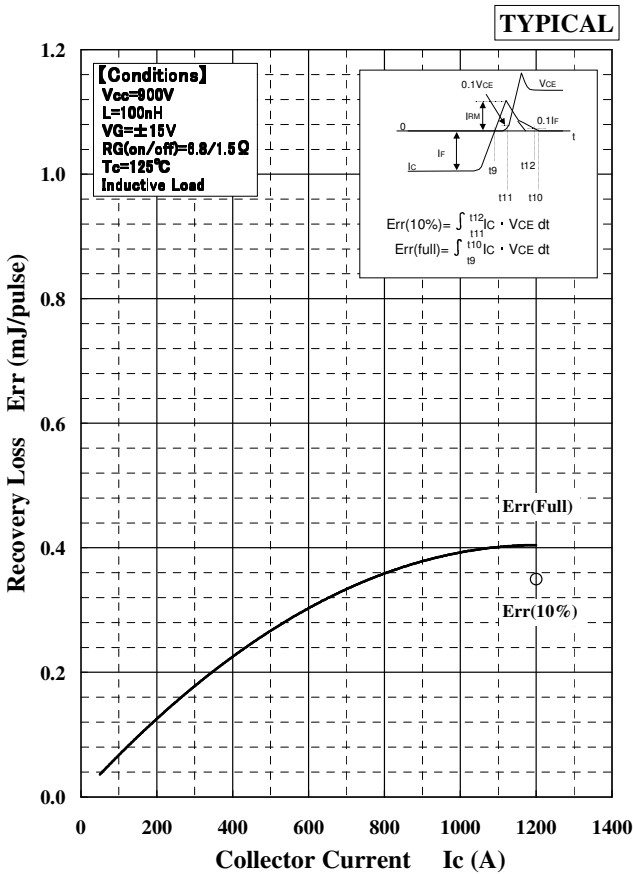
DEPENDENCE OF CURRENT



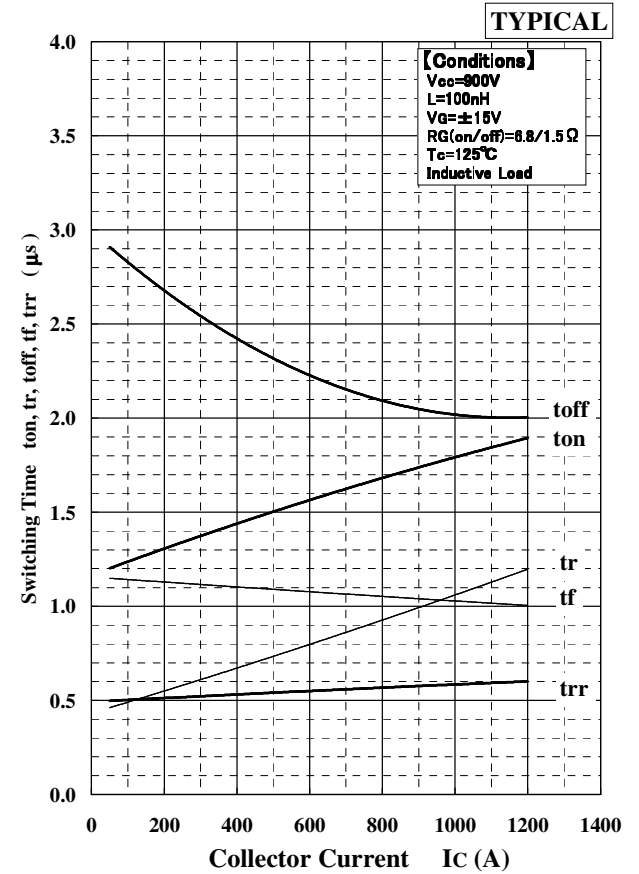
Turn-on Loss vs. Collector Current



Turn-off Loss vs. Collector Current

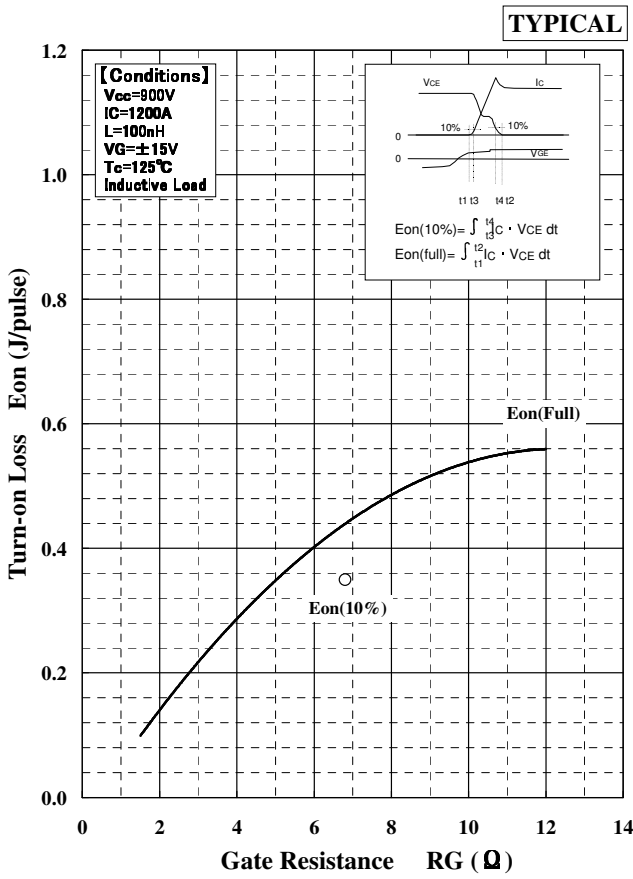


Recovery Loss vs. Collector Current

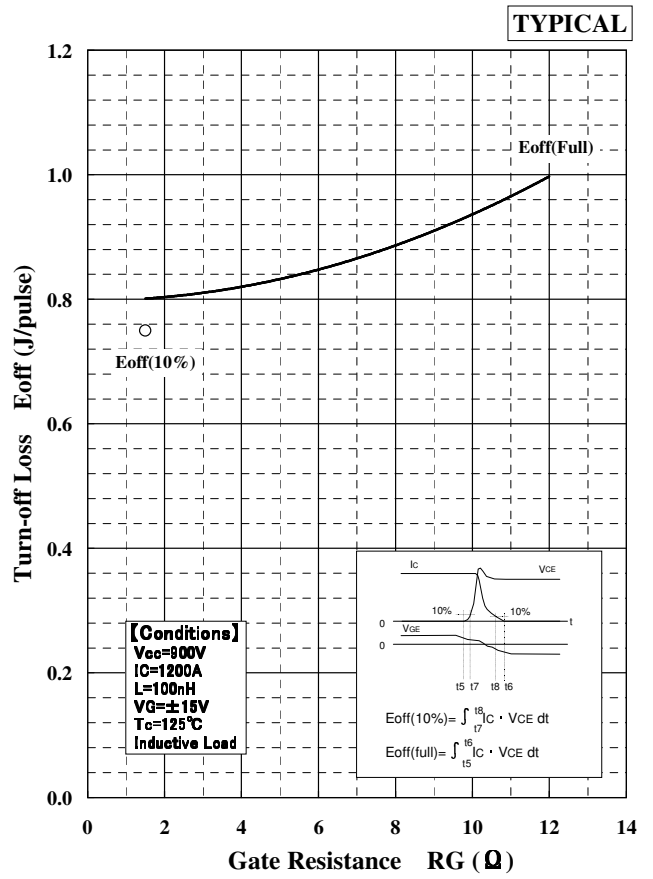


Switching Time vs. Collector Current

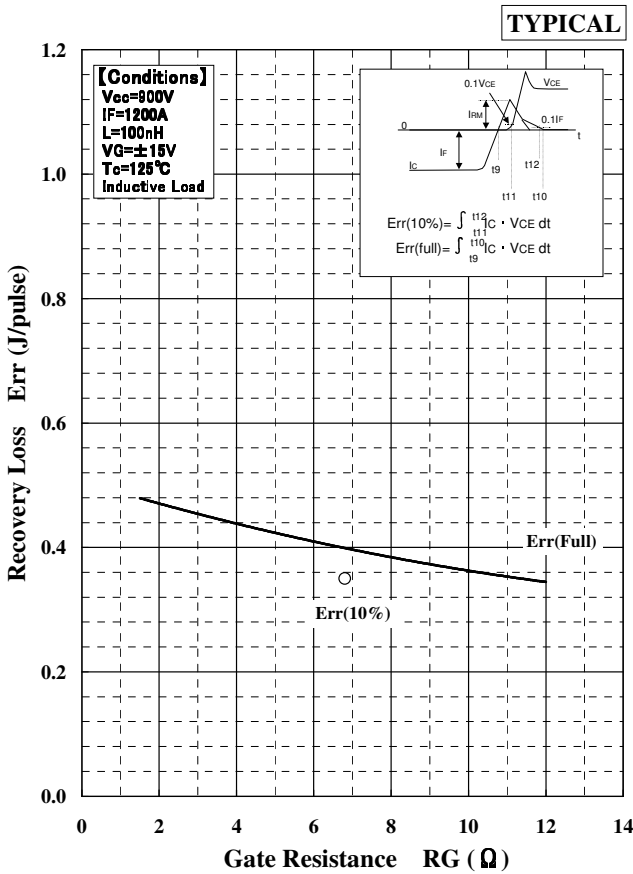
DEPENDENCE OF RG



Turn-on Loss vs. Gate Resistance

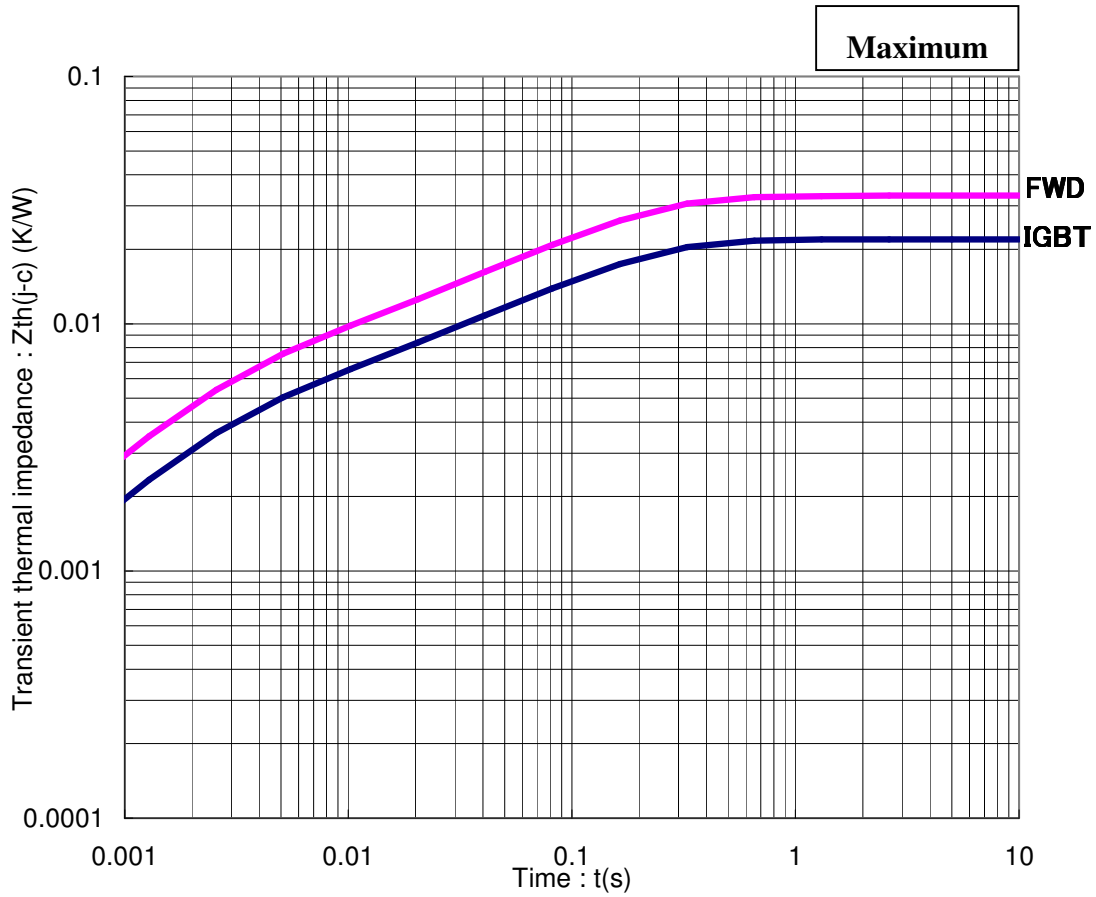


Turn-off Loss vs. Gate Resistance



Recovery Loss vs. Gate Resistance

**Thermal Impedance**  
**TRANSIENT THERMAL IMPEDANCE**



**Transient Thermal Impedance Curve**

**Negative environmental impact material**

Please note the following negative environmental impact materials are contained in the product in order to keep product characteristic and reliability level.

Material	Contained part
Lead (Pb) and its compounds	Solder
Arsenic and its compounds	Si chip

# HITACHI POWER SEMICONDUCTORS

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