

IGBT-inverter

ABSOLUTE MAXIMUM RATINGS($T_C = 25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter/Test Conditions		Values	
V_{CES}	Collector Emitter Voltage	$T_J=25$	600	V
V_{GES}	Gate Emitter Voltage		± 20	
I_C	DC Collector Current	$T_C=25$, $T_{Jmax}=175$	125	A
		$T_C=70$, $T_{Jmax}=175$	100	
I_{CM}	Repetitive Peak Collector Current	$tp=1\text{ms}$	200	
P_{tot}	Power Dissipation Per IGBT	$T_C=25$, $T_{Jmax}=175$	330	

Diode-inverter

ABSOLUTE MAXIMUM RATINGS ($T_C = 25^\circ\text{C}$ unless otherwise specified)

		$J=25$	600	

				Unit
				mA
				mA
				nA
				μC
				nF
				pF
				ns
				ns
				ns
			20	ns
$t_{d(off)}$	Turn off Delay Time	VeV		ns
			290	ns
t_f	Fall Time		$T_J=25$	ns
			$T=125$	ns

Unit
V

Unit
V
V

I_R	Reverse Leakage Current	$V_R=1600V, T_J=25$	μA
θ_{JC}	Junction to Case Thermal Resistance	Diode	$1/W$

Unit

mA

mA

nA

μ C

nF

pF

ns

ns

ns

ns

ns

ns

240

ns

ns

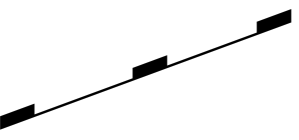
t_f e(t)]T28.3463 61.3175 TD 0 Tc 0 T(T(t)Tj 6.1237 0 0 6.1352 4.047146.0003 TmJ(f)Tj 9.2456 0 0 9.235465047384.0003 TD .0

MMG100W060XB6EN

$I_c(A)$

μ

$E_{on}E_{off}(mJ)$



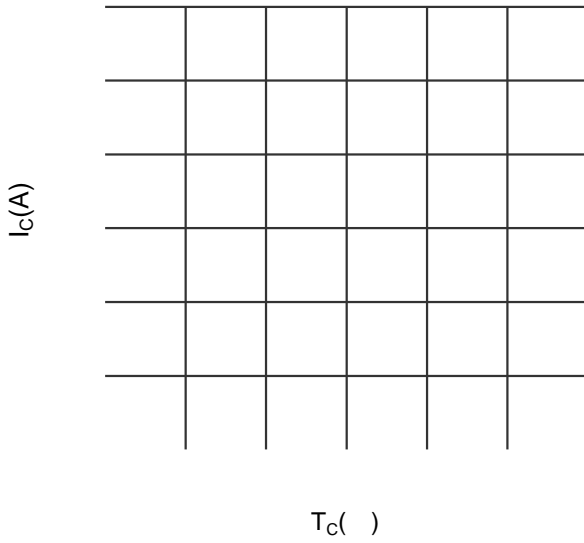


Figure 15. Collector Current vs Case temperature
IGBT -inverter

$I_F(A)$

$T_c()$

Figure 16. Forward current vs Case temperature
Diode -inverter

Dimensions in (mm)
Figure 18. Package Outline