

APPLICATIONS

			Unit
			W
			Unit V
I_t	$T_J=125$, $t=10ms$, $V_R=0V$	39.2	KA ² S

MacMic Science & Technology Co.gRgtd.9.2

Unit

nA

Unit

V

Nm

Nm

g

V_{CE} V

MMG450D120B6TC

$I_c(A)$

$V_{GE} \text{ V}$

Figure 3. Typical Transfer characteristics IGBT-inverter

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

R_g

Figure 4. Switching Energy vs Gate Resistor IGBT-inverter

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

$I_c \text{ A}$

Figure 5. Switching Energy vs Collector Current IGBT-inverter

$I_c(A)$

$V_{CE} \text{ V}$

Figure 6. Reverse Biased Safe Operating Area IGBT-inverter

$I_c(A)$

$T_c(\text{)}$

Figure 7. Collector Current vs Case temperature IGBT -inverter

$I_F(A)$

$T_c(\text{)}$

Figure 8. Forward current vs Case temperature Diode -inverter

MMG450D120B6TC

$I_F(A)$

$V_F(V)$

Figure 9. Diode Forward Characteristics Diode -inverter

$E_{REC}(mJ)$

R_g

Figure 10. Switching Energy vs Gate Resistor Diode - inverter

$E_{REC}(mJ)$

$I_{F,AD}$

Figure 11. Switching Energy vs Forward Current Diode-inverter

$Z_{th,dc}(K/W)$

Rectangular Pulse Duration t_{SD}

Figure 12. Transient Thermal Impedance of Diode and IGBT-inverter

