



ELECTRICAL CHARACTERISTICS: OM400L60CMS (Tc= 25°C unless otherwise specified)

Characteristic	Symbol	Min.	Typ.	Max	Unit
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OFF CHARACTERISTICS

Collector Emitter Breakdown Voltage, VCE=0V	V _{CES}	600			V
Zero Gate Voltage Drain Current, V _{GE} =0, V _{CE} =600V	I _{CES}		25		μA
Gate Emitter Leakage Current, V _{GE} =+/-15V, V _{CE} =0V	I _{GES}			2	μA

ON CHARACTERISTICS

Gate Threshold Voltage, V _{CE} =V _{GE} , I _C =6mA	V _{GE(TH)}	4.5		6.5	V
Collector Emitter Saturation Voltage, V _{GE} =15V, I _C =400A	V _{CE(SAT)}		2.4	2.7	V

DYNAMIC CHARACTERISTICS

Fwd. Transconductance	V _{CE} =5V, I _C =400A	g _{fs}		42	S
Input Capacitance	V _{GE} =0	C _{ies}		20000	pF
Output Capacitance	V _{CE} =25V	C _{oes}		1080	pF
Rev. Transfer Capacitance	f=1.0MHz	C _{res}		1120	pF

SWITCHING INDUCTIVE LOAD CHARACTERISTICS

Turn-On Delay Time	V _{CC} = 300V, I _C =400A	t(on)		800	1600	nS
Rise Time		t _r		400	800	nS
Turn-on Losses		E _{on}		20		mJ
Turn-off Delay Time	V _{GE} =+15/-10V, R _G =6.8Ω L=100μH, T _j =125°C	t _{d(off)}		800	1200	nS
Fall Time		t _f		350	800	nS
Turn-off Losses		E _{off}		25		mJ

DIODE CHARACTERISTICS

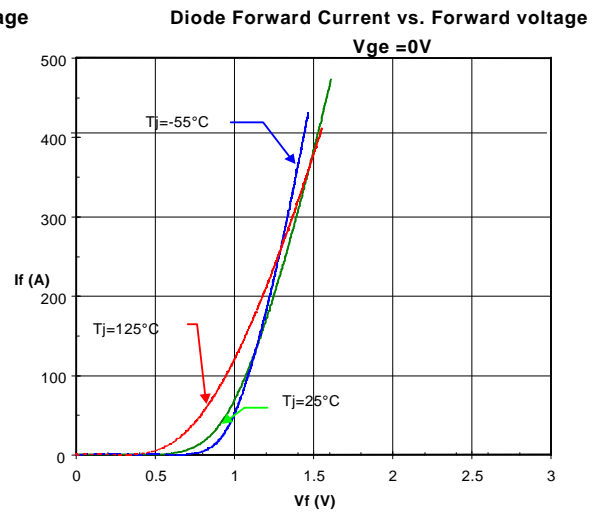
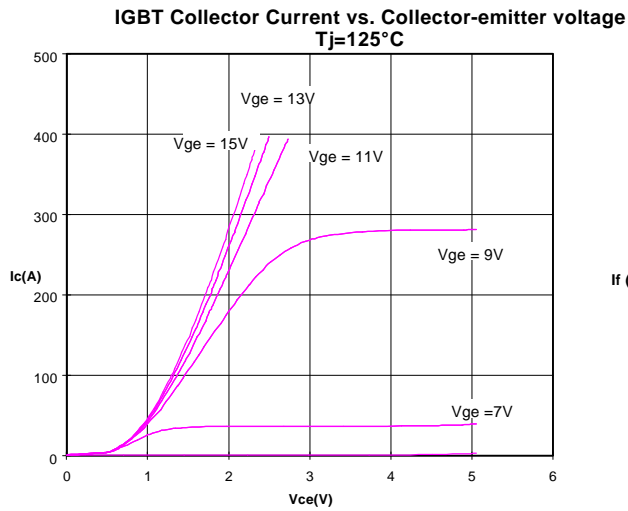
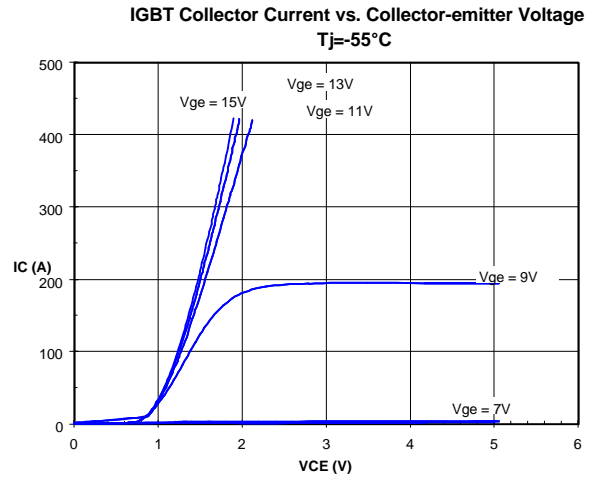
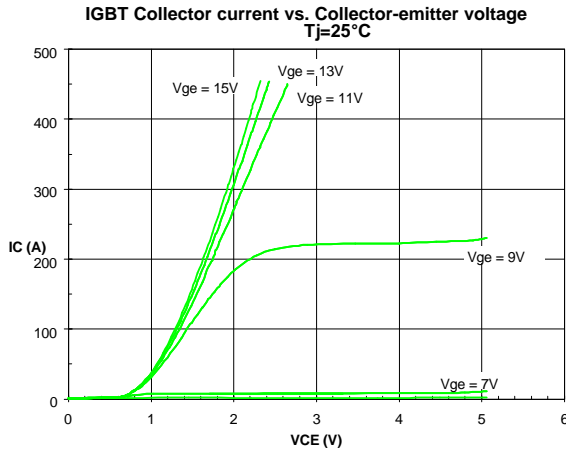
Maximum Forward Voltage	I _F =400A, T _j =25°C T _j =125°C	V _F		1.5	2.0	V
Reverse Recovery Characteristics	V _R =300V, T _j =25°C I _F =400A, T _j =125°C dI/dt=-1500A/μS T _j =25°C	Q _{rr}		10		μC
				24		
		I _{rr}		60		A
				90		
trr		160		nS		
		220				

THERMAL AND MECHANICAL CHARACTERISTICS

Thermal Resistance, Junction to Case (Per IGBT)	R _{thJC}			0.085	°C/W
Thermal Resistance, Junction to Case (Per Diode)	R _{thJC}			0.15	°C/W
Maximum Junction Temperature	T _{jMAX}			150	°C
Isolation Voltage	V _{isRMS}			2500	V
Screw Torque	Mounting	-	15	20	in-lb
Screw Torque (M6)	Terminals	-	10	12	in-lb
Screw Torque (M3)	Terminals	-	6	8	in-lb
Module Weight	-	-		400	Grams

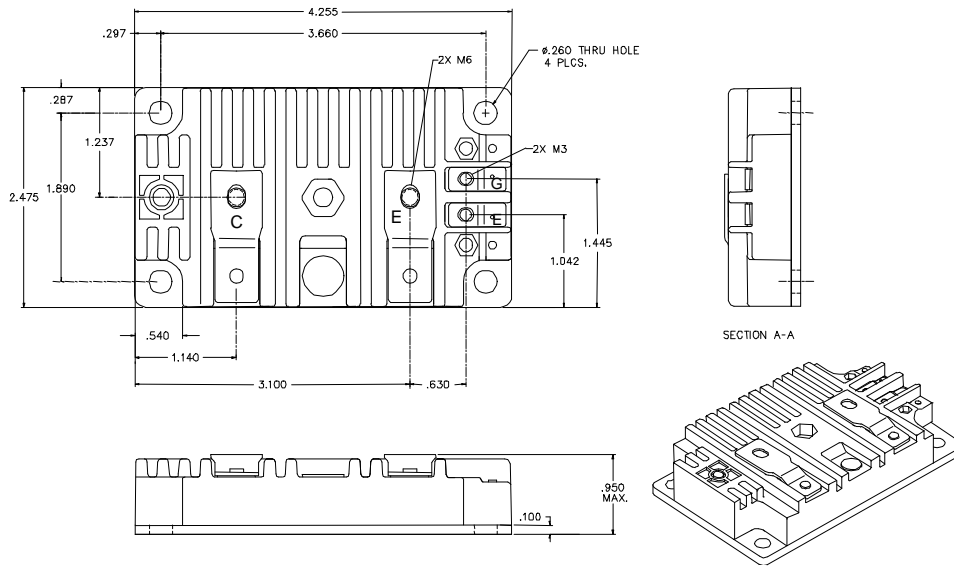


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MECHANICAL OUTLINE



EQUIVALENT CIRCUIT

