

ELECTRICAL CHARACTERISTICS: OM150F120CMD (Tc= 25°C unless otherwise specified)

Characteristic	Symbol	Min.	Typ.	Max	Unit
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OFF CHARACTERISTICS

Collector Emitter Breakdown Voltage, VCE=0V	VCES	1200			V
Zero Gate Voltage Drain Current, VGE=0, VCE =1200V	ICES		2		μA
Gate Emitter Leakage Current, VGE=+/-15V, VCE=0V	IGES		100		μA

ON CHARACTERISTICS

Gate Threshold Voltage, VCE=VGE, IC=6mA	VGE(TH)	4.5		6.5	V
Collector Emitter Saturation Voltage, VGE=15V, IC=150A	VCE(SAT)			3.0	V

DYNAMIC CHARACTERISTICS

Fwd. Transconductance	VCE=5V, IC=150A	gfs	17		S
Input Capacitance	VGE=0	Cies		14	nF
Output Capacitance	VCE=25V	Coes		1.75	nF
Rev. Transfer Capacitance	f=1.0MHz	Cres		1.2	nF

SWITCHING INDUCTIVE LOAD CHARACTERISTICS

Turn-On Delay Time	VCC= 600V, IC=150A VGE=+15/-10V, RG=4.7Ω L=100μH	t(on)		400	nS
Rise Time		tr	140		nS
Turn-on Losses		Eon			mJ
Turn-off Delay Time		td(off)		800	nS
Fall Time		tf	100		nS
Turn-off Losses		Eoff			mJ

DIODE CHARACTERISTICS

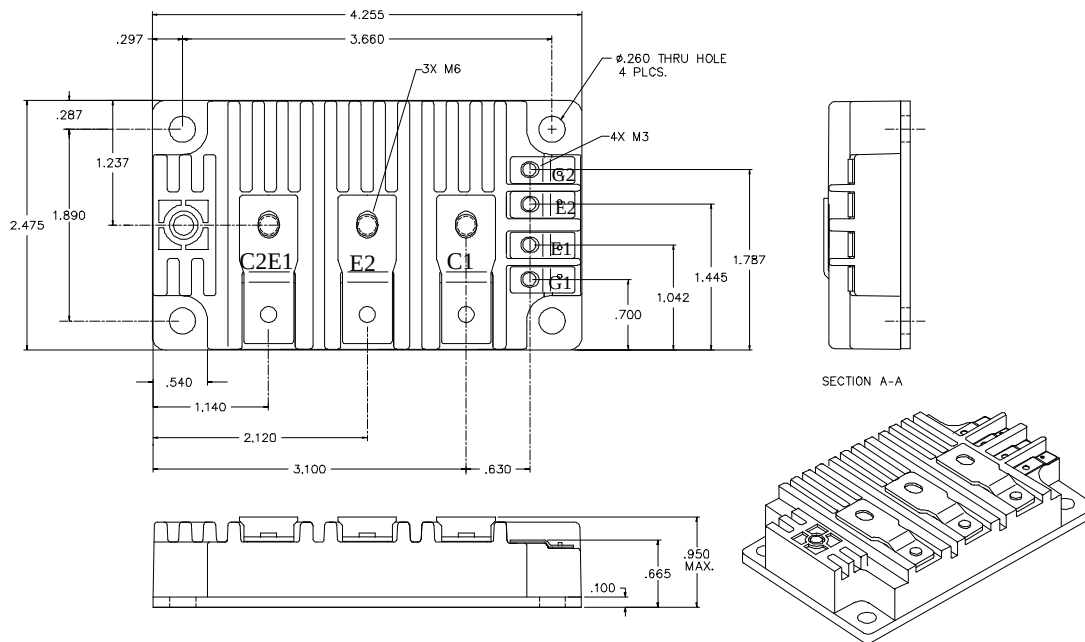
Maximum Forward Voltage	IF=150A, Tj=25°C Tj=125°C	VF		2.8 2.3	V
Reverse Recovery Characteristics	VR=600V, Tj=25°C IF=150A, Tj=125°C dI/dt=-1500A/μS Tj=25°C Tj=125°C Tj=25°C Tj=125°C	Qrr		12 33	μC
		Irr			A
		trr		200 400	nS

THERMAL AND MECHANICAL CHARACTERISTICS

Thermal Resistance, Junction to Case (Per IGBT)	RthJC			0.11	°C/W
Thermal Resistance, Junction to Case (Per Diode)	RthJC			0.20	°C/W
Maximum Junction Temperature	TjMAX			150	°C
Isolation Voltage	ViSRMS			2500	V
Screw Torque	Mounting	-	15	20	in-lb
Screw Torque (M6)	Terminals		10	15	in-lb
Screw Torque (M3)	Terminals	-	6	8	in-lb
Module Weight		-	320		Grams

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MECHANICAL OUTLINE



EQUIVALENT CIRCUIT

