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Technical drawing of a mechanical part, likely a mold, showing top, side, and cross-sectional views with dimensions in millimeters.

Top View Dimensions:

- Overall width: 107.5 ± 1
- Overall height: 45 ± 1
- Inner width: 93 ± 0.3
- Inner height: 69.6 ± 0.3
- Top edge features (from left to right):
 - 4 holes: $4 - \phi 6.1 \pm 0.3$
 - 2 holes: $2 - \phi 5.5 \pm 0.3$
- Bottom edge features (from left to right):
 - 1 hole: $\phi 3.81$
 - 5 holes: $5 - \phi 11.43$
 - 1 hole: $\phi 1.15 \pm 0.2$
 - 1 hole: $\phi 0.4$
- Section A-A is indicated on the right side.

Side View Dimensions:

- Overall height: 20.5 ± 1
- Top flange height: 3.5 ± 0.5
- Top flange width: 17 ± 1
- Top flange thickness: 2.5 ± 0.3
- Top flange hole diameter: $\phi 6.5 \pm 0.5$
- Top flange hole position: 1 ± 0.2

Cross-Section A-A Dimensions:

- Overall width: 6
- Top flange thickness: 1.5
- Top flange hole diameter: $\phi 2.5 \pm 0.1$
- Top flange hole position: $\phi 2.1 \pm 0.1$

☐ shows theoretical dimension.

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DWG. NO.

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3. Absolute Maximum Ratings (at Tc= 25°C unless otherwise specified)

Items	Symbols	Conditions	Maximum Ratings	Units
Collector-Emitter voltage	V _{CE}		600	V
Gate-Emitter voltage	V _{GE}		±20	V
Collector current	I _c	Continuous	20	A
	I _c pulse	1ms	40	
	-I _c		20	
	-I _c pulse	1ms	40	
Collector Power Dissipation	P _c	1 device	80	W
Junction temperature	T _j		150	°C
Storage temperature	T _{stg}		-40~ +125	°C
Isolation voltage ^(*1)	Viso	AC : 1min.	2500	V
Mounting Screw Torque ^(*2)			3.5	N·m

(*1) All terminals should be connected together when isolation test will be done.

(*2) Recommendable Value : 2.5~3.5 N·m (M5)

4. Electrical characteristics (at T_j= 25°C unless otherwise specified)

Items	Symbols	Conditions	Characteristics			Units
			min.	typ.	Max.	
Zero gate voltage Collector current	ICES	V _{GE} = 0 V, V _{CE} = 600 V			1.0	mA
Gate-Emitter leakage current	IGES	V _{CE} = 0 V, V _{GE} = ±20 V			200	nA
Gate-Emitter threshold voltage	V _{GE(th)}	V _{CE} = 20 V, I _c = 20 mA		7.8		V
Collector-Emitter saturation voltage	V _{CE(sat)}	V _{GE} = 15 V, T _j = 25 °C		1.95		V
		I _c = 20 A, T _j = 125 °C		2.1		
Input capacitance	C _{ies}	V _{GE} = 0 V		2000		pF
Output capacitance	C _{oes}	V _{CE} = 10 V		360		
Reverse transfer capacitance	C _{res}	f = 1 MHz		240		
Turn-on time	ton	V _{cc} = 300 V		0.45		μs
	tr	I _c = 20 A		0.25		
	tr _(i)	V _{GE} = ±15 V		0.08		
Turn-off time	toff	RG = 120 Ω		0.40		
	tf			0.05		
Forward on voltage	V _F	I _F = 20 A, T _j = 25 °C		1.95		V
		T _j = 125 °C		1.8		
Reverse recovery time	trr	I _F = 20 A				ns

5. Thermal resistance characteristics

Items	Symbols	Conditions	Characteristics			Units
			min.	typ.	Max.	
Thermal resistance (1 device)	R _{th(j-c)}	IGBT			1.56	°C/W
		FWD			3.00	
Contact Thermal resistance	R _{th(c-f)}	with Thermal Compound ^(※)		0.05		

※ This is the value which is defined mounting on the additional cooling fin with thermal compound.

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