

# IGBT Transistor

## **GT60M105**

900V / 60A

# DATASHEET

OEM – Toshiba

Source: Toshiba Databook 1995/96

## MAXIMUM RATINGS (Ta=25°C)

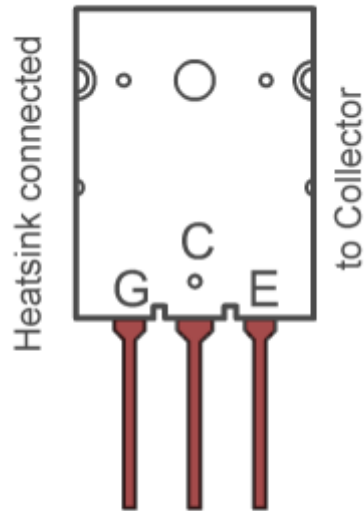
GT60M105				
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Emitter Voltage		Vces	900	V
Gate-Emitter Voltage		Vges	+/-25	V
Collector Current	DC	IC	60	A
	1ms	Icp	120	A
Collector Power Dissipation		Pc	200	W
Junction Temperature		Tj	150	°C
Storage Temperature Range		Tstg	-55~150	°C
Screw Torque		-	0.80	N*m

Source: Toshiba IGBT Databook 95/96

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

GT60M105						
CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	Iges	Uge=+/-25V, Vce=0	-	-	+500	nA
Collector Cut-off Current	Ices	Uce=900V, Uge=0	-	-	1.0	mA
Gate-Emitter Cut-off Voltage	Uge (off)	Ic=60mA, Uce=5V	3.0	-	6.0	V
Collector-Emitter Saturation Voltage	Uce (sat)1	IC=10A, Uge=15V	-	-	2.40	
	Uce (sat)2	IC=60A, Uge=15V	-	2.10	3.20	V
Input Capacitance	Cies	Uce=10V, Uge=0, f=1MHz	-	3600	-	pF
Switching Time	Rise Time	tr	-	0.40	0.80	uS
	Turn-on Time	ton	-	0.50	1.00	
	Fall Time	tf	-	0.25	0.40	
	Turn-off Time	toff	-	0.80	1.20	
Thermal Resistance	Rth (j-c)	-	-	-	0.625	°C/W

2-21F2C



EQUIVALENT CIRCUIT

