

# IGBT Transistor

## **GT15Q101**

1200V / 15A

# DATASHEET

OEM – Toshiba

Source: Toshiba Databook 1995/96

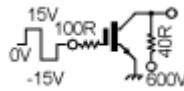
## MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	Vces	1200	V
Gate-Emitter Voltage	Vges	+/-20	V
Collector Current	DC	IC	15
	1ms	Icp	30
Collector Power Dissipation	Pc	150	W
Junction Temperature	Tj	150	°C
Storage Temperature Range	Tstg	-55~150	°C

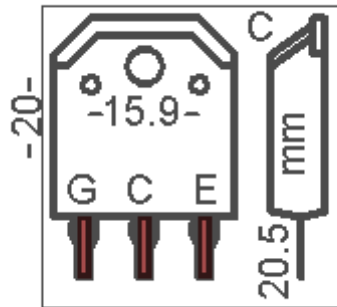
Source: Toshiba IGBT Databook 95/96

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	Iges	Uge=+/-20V, Vce=0	-	-	+500	nA
Collector Cut-off Current	Ices	Uce=1200V, Uge=0	-	-	1.0	mA
Collector-Emitter Breakdown Voltage	U(br) CES	Ic=2mA, Uge=0	1200	-	-	V
Gate-Emitter Cut-off Voltage	Uge (off)	Ic=15mA, Uce=5V	3.0	-	6.0	V
Collector-Emitter Saturation Voltage	Uce (sat)	IC=15A, Uge=15V	-	3.0	4.0	V
Input Capacitance	Cies	Uce=10V, Uge=0, f=1MHz	-	1800	-	pF
Switching Time	Rise Time	tr	-	0.30	0.60	uS
	Turn-on Time	ton	-	0.40	0.80	
	Fall Time	tf	-	0.25	0.50	
	Turn-off Time	toff	-	0.80	1.50	



2-16C1C



EQUIVALENT CIRCUIT

