

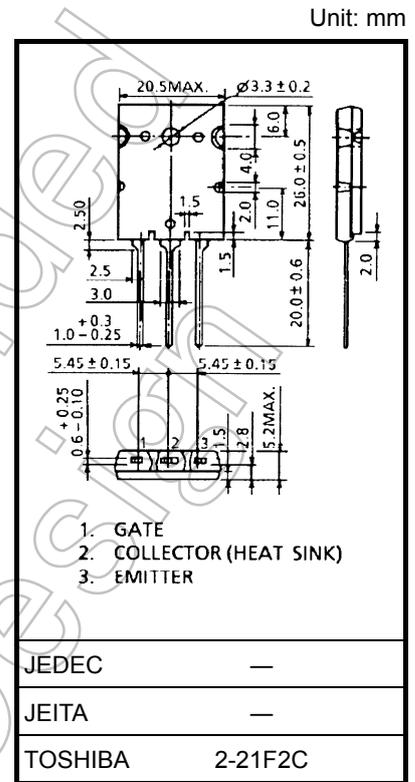
GT60N321

High-Power Switching Applications Fourth Generation IGBT

- FRD included between emitter and collector
- Enhancement mode type
- High speed IGBT : $t_f = 0.25 \mu s$ (typ.) ($I_C = 60 A$)
FRD : $t_{rr} = 0.8 \mu s$ (typ.) ($di/dt = -20 A/\mu s$)
- Low saturation voltage: $V_{CE(sat)} = 2.3 V$ (typ.) ($I_C = 60 A$)

Absolute Maximum Ratings ($T_a = 25^\circ C$)

Characteristics		symbol	Rating	Unit
Collector-Emitter Voltage		V_{CES}	1000	V
Gate-Emitter Voltage		V_{GES}	± 25	V
Collector Current	DC	I_C	60	A
	1 ms	I_{CP}	120	
Emitter-Collector Forward Current	DC	I_{ECF}	15	A
	1 ms	I_{ECFP}	120	
Collector Power Dissipation ($T_c = 25^\circ C$)		P_C	170	W
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature		T_{stg}	-55 to 150	$^\circ C$
Screw Torque		-	0.8	N·m



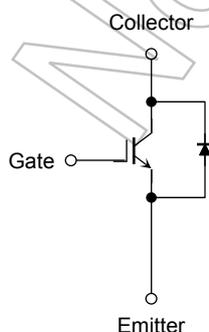
JEDEC	—
JEITA	—
TOSHIBA	2-21F2C

Weight: 9.75 g (typ.)

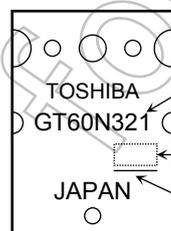
Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

Equivalent Circuit



Marking



Part No. (or abbreviation code)

Lot No.

Note 1

Note 1 line under a Lot No. identifies the indication of product Labels.
Not underlined: [[Pb]]/INCLUDES > MCV
Underlined: [[G]]/RoHS COMPATIBLE or [[G]]/RoHS [[Pb]]

Please contact your TOSHIBA sales representative for details as to environmental matters such as the RoHS compatibility of Product. The RoHS is the Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Start of commercial production
2000-03