

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

**20DL2C41A, 20FL2C41A, 20GL2C41A**

SWITCHING TYPE POWER SUPPLY APPLICATION

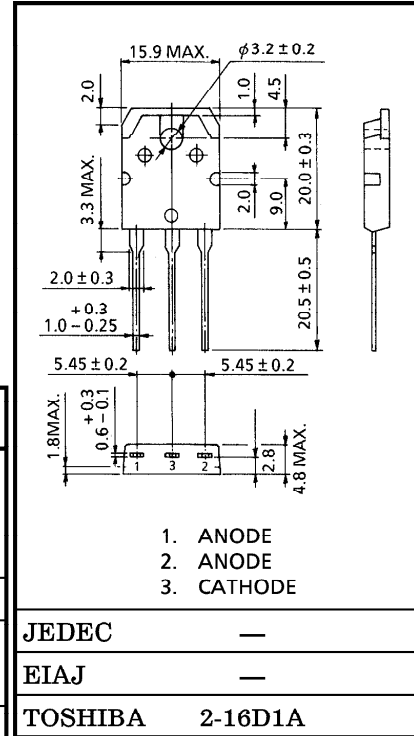
Unit in mm

CONVERTER & CHOPPER APPLICATION

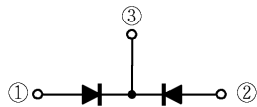
- Repetitive Peak Reverse Voltage :  $V_{RRM}=200, 300, 400V$
- Average Output Rectified Current :  $I_O=20A$
- Ultra Fast Reverse-Recovery Time :  $t_{rr}=35ns$  (Max.)
- Low Switching Losses and Output Noise

MAXIMUM RATINGS

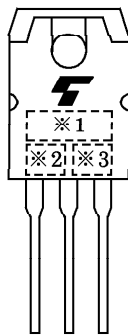
CHARACTERISTIC		SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	20DL2C41A	$V_{RRM}$	200	V
	20FL2C41A		300	
	20GL2C41A		400	
Average Output Rectified Current		$I_O$	20	A
Peak One Cycle Surge Forward Current (Non Repetitive)		$I_{FSM}$	100 (50Hz)	A
			110 (60Hz)	
Junction Temperature		$T_j$	-40~150	°C
Storage Temperature Range		$T_{stg}$	-40~150	°C
Screw Torque		—	0.8	N·m



POLARITY



MARKING



※1	MARK	20DL2C	TYPE	20DL2C41A
		20FL2C		20FL2C41A
		20GL2C		20GL2C41A
※2	A			
※3	Lot number			
	□ □	Month (Starting from Alphabet A)		
	□	Year (Last Number of the Christian Era)		

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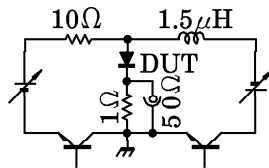
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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

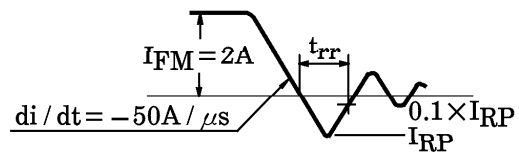
CHARACTERISTIC		SYMBOL	TEST CONDITION	TYP.	MAX.	UNIT
Peak Forward Voltage (Note 1)	20DL2C41A	V <sub>FM</sub>	I <sub>FM</sub> = 10A	—	0.98	V
	20FL2C41A			—	1.3	
	20GL2C41A			—	1.8	
Repetitive Peak Reverse Current (Note 1)		I <sub>RRM</sub>	V <sub>RRM</sub> = Rated	—	50	μA
Reverse Recovery time (Note 1)		t <sub>rr</sub>	I <sub>F</sub> = 2.0A, di/dt = -50A/μs	—	35	ns
Forward Recovery time (Note 1)		t <sub>fr</sub>	I <sub>F</sub> = 1A	—	100	ns
Thermal Resistance		R <sub>th(j-c)</sub>	DC Total, Junction to Case	—	1.5	°C/W

Note 1 : A value of one cell.

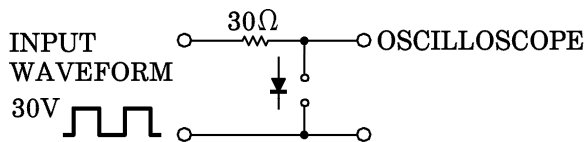
Note 2 : t<sub>rr</sub> TEST CIRCUIT



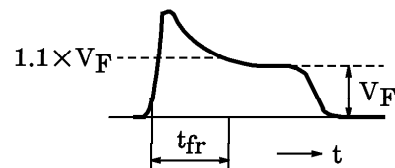
t<sub>rr</sub> WAVEFORM



Note 3 : t<sub>fr</sub> TEST CIRCUIT



t<sub>fr</sub> WAVEFORM



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