

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

20DL2C41A, 20FL2C41A, 20GL2C41A

SWITCHING TYPE POWER SUPPLY APPLICATION

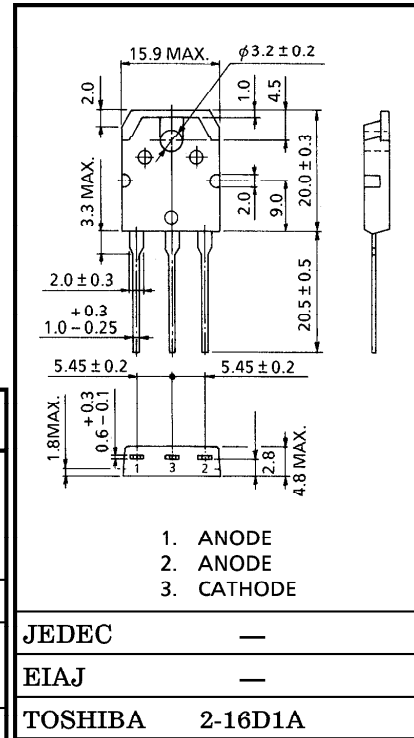
CONVERTER & CHOPPER APPLICATION

- 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

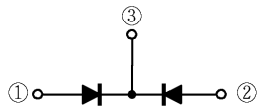
MAXIMUM RATINGS

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

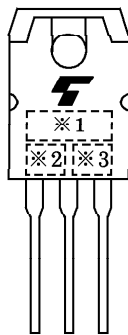
Unit in mm



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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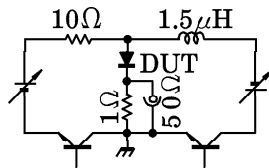
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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

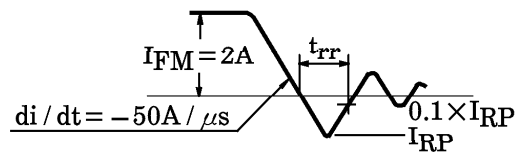
CHARACTERISTIC		SYMBOL	TEST CONDITION	TYP.	MAX.	UNIT
Peak Forward Voltage (Note 1)	20DL2C41A	V _{FM}	I _{FM} = 10A	—	0.98	V
	20FL2C41A			—	1.3	
	20GL2C41A			—	1.8	
Repetitive Peak Reverse Current (Note 1)		I _{RRM}	V _{RRM} = Rated	—	50	μA
Reverse Recovery time (Note 1)		t _{rr}	I _F = 2.0A, di/dt =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

Note 1 : A value of one cell.

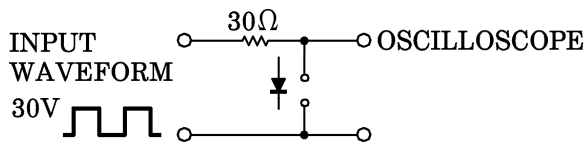
Note 2 : t_{rr} TEST CIRCUIT



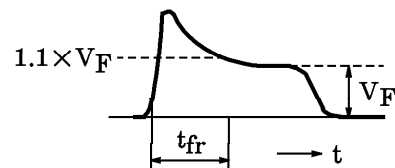
t_{rr} WAVEFORM



Note 3 : t_{fr} TEST CIRCUIT



t_{fr} WAVEFORM



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