TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

20DL2C41A,20FL2C41A,20GL2C41A

SWITCHING MODE POWER SUPPLY APPLICATIONS CONVERTER & CHOPPER APPLICATION

• Repetitive Peak Reverse Voltage : V_{RRM} = 200, 300, 400V

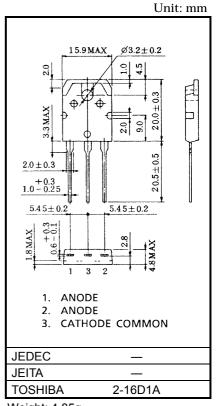
• Average Output Rectified Current : Io = 20A

• Ultra Fast Reverse-Recovery Time : trr = 35ns (Max)

• Low Switching Losses and Output Noise

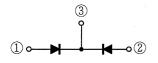
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Repetitive Peak Reverse Voltage	20DL2CZ41A		200	V	
	20FL2CZ41A	V_{RRM}	300		
	20GL2CZ41A		400		
Average Output Rectified Current		Io	20	Α	
Peak One Cycle Surge Forward Current (Non Repetitive)		leon	100 (50H _Z)	А	
		IFSM	110 (60H _Z)		
Junction Temperature		Tj	-40~150	°C	
Storage Temperature Range		T _{stg}	-40~150	°C	
Screw Torque		_	0.8	N·m	

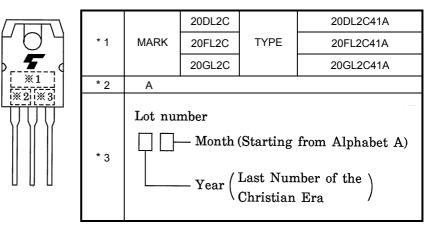


Weight: 4.85g

POLARITY



MARKING

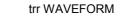


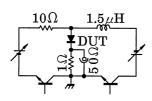
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

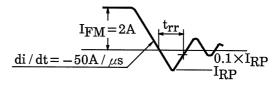
CHARACTERISTIC		SYMBOL	TEST CONDITION	TYP.	MAX	UNIT
Peak Forward Voltage (Note 1)	20DL2C41A		I _{FM} = 10A	_	0.98	
	20FL2C41A	V_{FM}		-	1.3	V
	20GL2C41A			_	1.8	
Repetitive Peak Reverse Current (Note 1)		I _{RRM}	V _{RRM} = Rated	-	50	μΑ
Reverse Recovery Time (Note 1)		t _{rr}	$I_F = 2.0A$, di / dt = $-50A$ / 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: trr TEST CIRCUIT

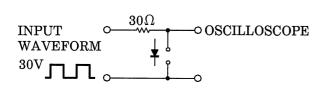


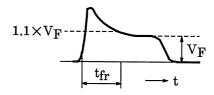


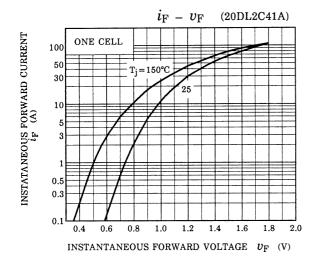


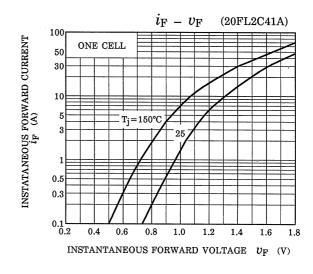
Note 3: tfr TEST CIRCUIT

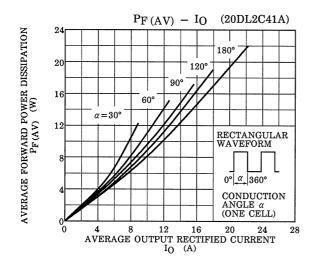
tfr Waveform

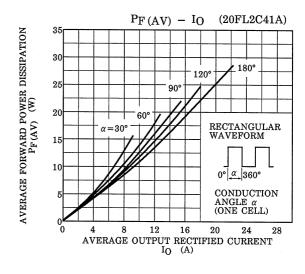


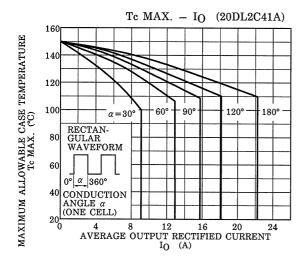


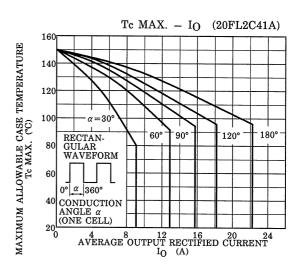


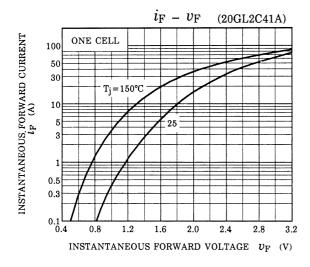


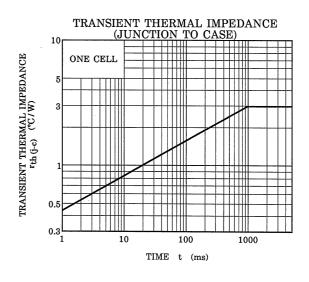


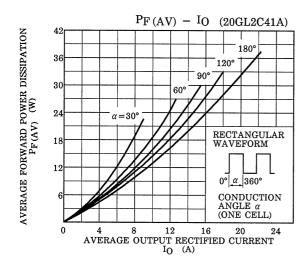


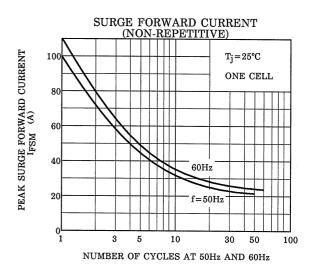


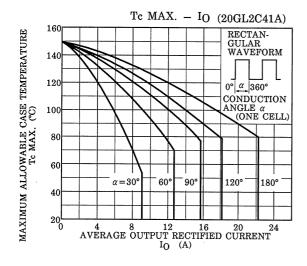


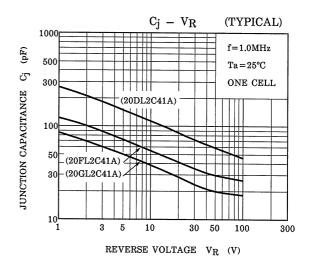












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