TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

20DL2CZ51A,20FL2CZ51A

SWITCHING MODE POWER SUPPLY APPLICATIONS CONVERTER & CHOPPER APPLICATION

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

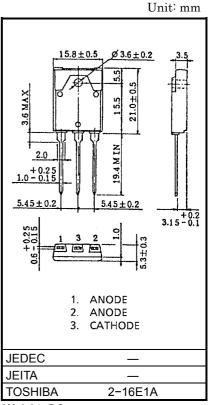
• Average Output Rectified Current : IO = 20A

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

• Low Switching Losses and Output Noise

MAXIMUM RATINGS (Ta = 25°C)

| CHARAC | TERISTIC | SYMBOL | RATING | UNIT | |
|---|------------|------------------|-------------------------|------|--|
| Repetitive Peak Reverse Voltage | 20DL2CZ51A | V _{RRM} | 200 | V | |
| | 20FL2CZ51A | V KKM | 300 | | |
| Average Output Rectified Current | | Io | 20 | Α | |
| Peak One Cycle Surge Forward Current (Sine Wave) | | I _{FSM} | 100 (50H _Z) | А | |
| | | | 110 (60H _Z) | | |
| Junction Temperature | | Tj | -40~150 | °C | |
| Storage Temperatu | ıre Range | T _{stg} | -40~150 | °C | |



Weight: 5.9g

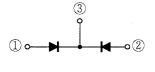
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

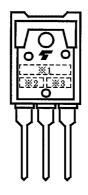
| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN | TYP. | MAX | UNIT |
|--------------------------------|------------|-----------------------|---|-----|------|------|------|
| Peak Forward Voltage | 20DL2CZ51A | - V _{FM} | I _{FM} = 10A | _ | _ | 0.98 | V |
| | 20FL2CZ51A | | | _ | _ | 1.3 | |
| Repetitive Peak ReverseCurrent | | I _{RRM} | V _{RRM} = Rated | _ | _ | 50 | μA |
| Reverse Recovery Time | | t _{rr} | I _F = 2A, di / dt = - 50A / μs | _ | _ | 35 | ns |
| Forward Recovery Time | | t _{fr} | I _F = 1A | _ | _ | 100 | ns |
| Thermal Resistance | | R _{th (j-c)} | DC Total, Junction to Case | _ | _ | 2.0 | °C/W |

V_{FM}, I_{RRM}, t_{rr}, t_{fr}: A value of one cell.

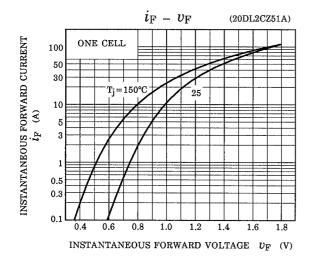
POLARITY

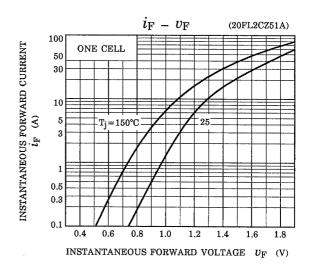
MARKING

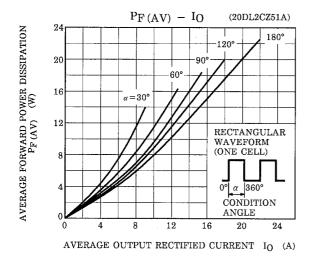


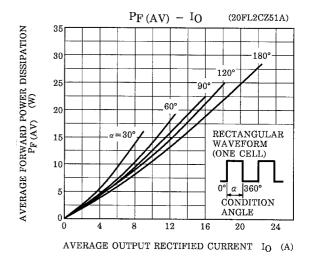


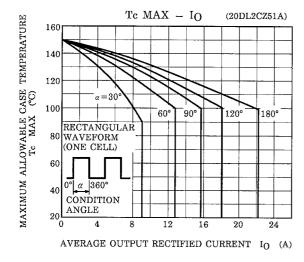
| * 1 | MARK | 20DL2CZ | TYPE | 20DL2CZ51A | | | | | |
|--------------------------------------|----------------------------------|---------|------|------------|--|--|--|--|--|
| | | 20FL2CZ | ITFE | 20FL2CZ51A | | | | | |
| * 2 | Α | | | | | | | | |
| | Lot Number | | | | | | | | |
| * 3 | Month (Starting from Alphabet A) | | | | | | | | |
| Year (Last Number of the Christian F | | | | | | | | | |

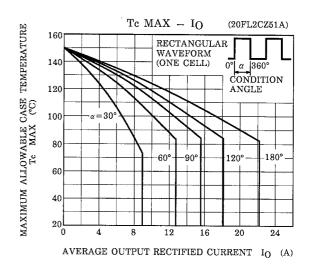




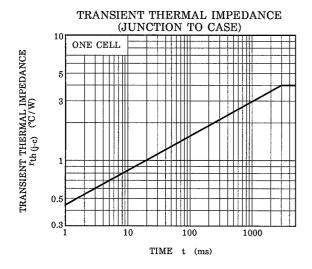


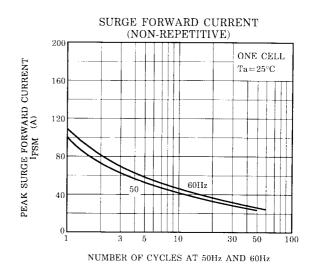


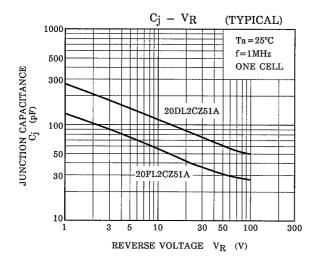




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