

TOSHIBA High Efficiency Rectifier (HED) Silicon Epitaxial Junction Type

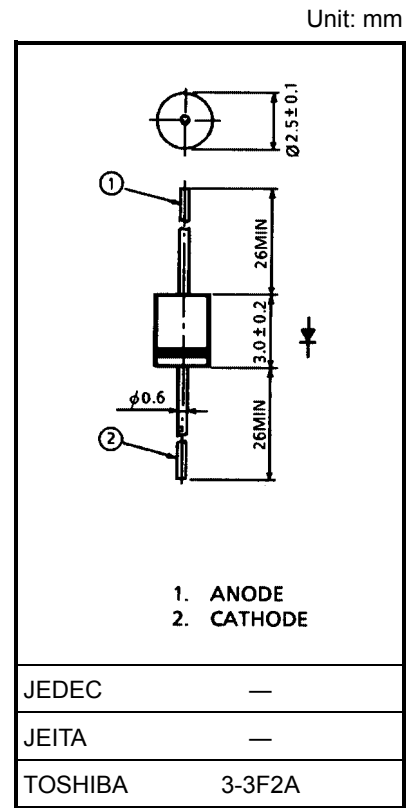
# 1DL42A

## Switching Mode Power Supply Applications

- Repetitive Peak Reverse Voltage:  $V_{RRM} = 200\text{ V}$
- Average Forward Current:  $I_F (AV) = 1.0\text{ A}$
- Very Fast Reverse-Recovery Time:  $t_{rr} = 35\text{ ns (max)}$
- Low Forward Voltage:  $V_{FM} = 0.98\text{ V (max)}$
- Available to Reduce Switching Losses and Output Noise.

## Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$	200	V
Average forward current	$I_F (AV)$	1.0	A
Peak one cycle surge forward current (non-repetitive)	$I_{FSM}$	30 (50 Hz)	A
		33 (60 Hz)	
Junction temperature	$T_j$	-40 to 150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-40 to 150	$^\circ\text{C}$

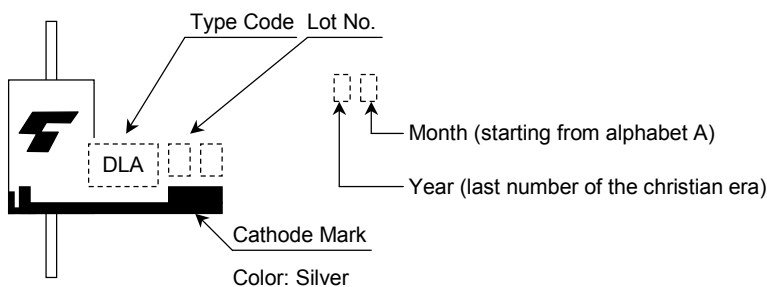


Weight: 0.18 g (typ.)

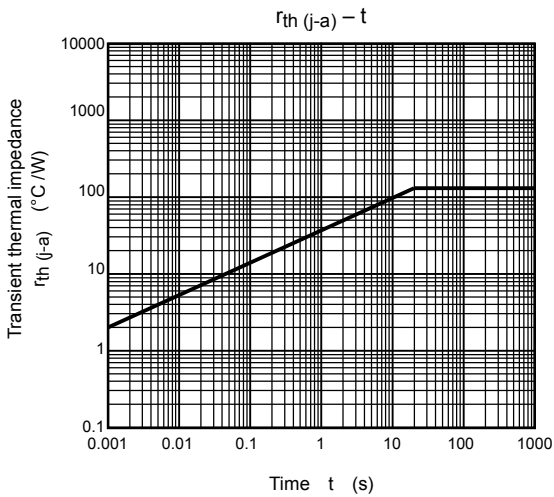
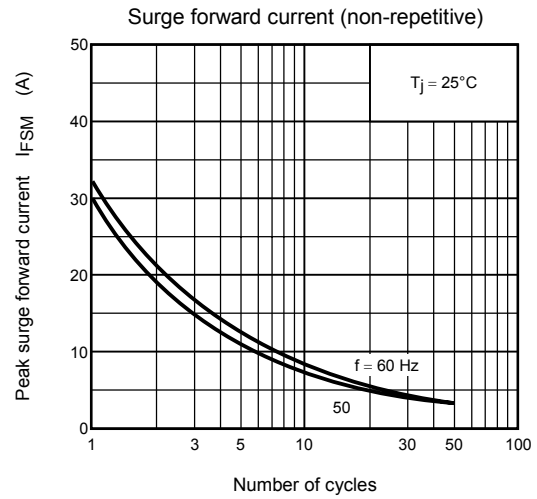
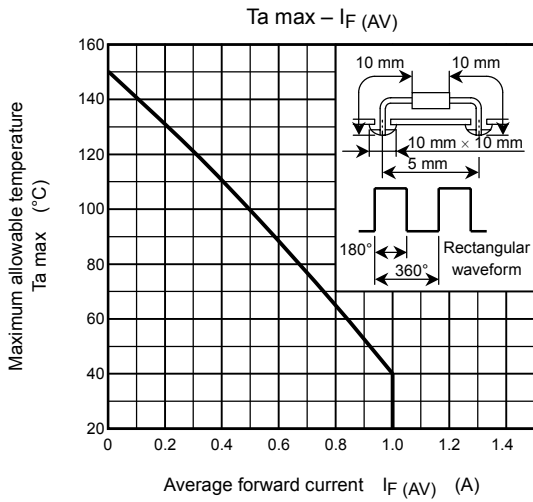
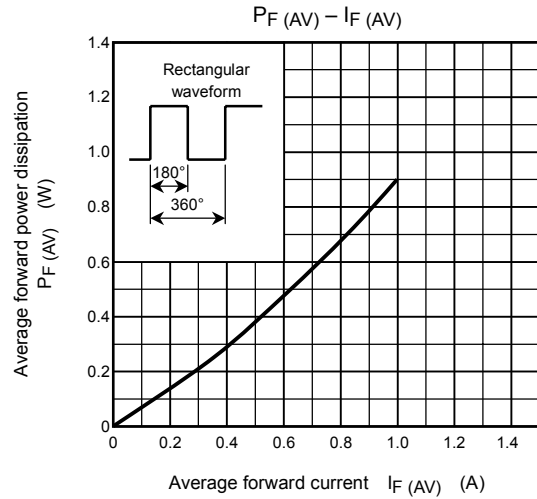
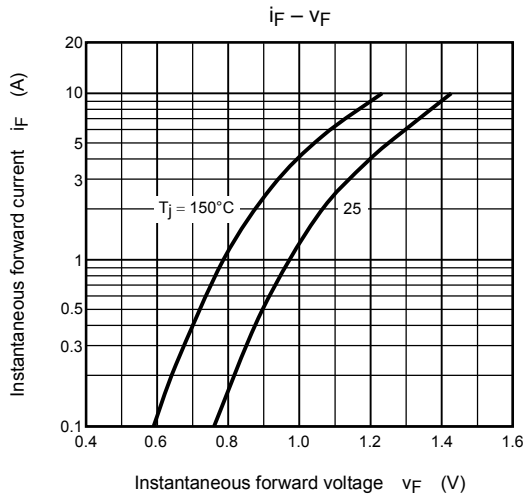
## Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Peak forward voltage	$V_{FM}$	$I_{FM} = 1.0\text{ A}$	—	—	0.98	V
Repetitive peak reverse current	$I_{RRM}$	$V_{RRM} = 200\text{ V}$	—	—	100	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F = 1\text{ A}, di/dt = -30\text{ A}/\mu\text{s}$	—	—	35	ns
Forward recovery time	$t_{fr}$	$I_F = 1.0\text{ A}$	—	—	100	ns

## Marking



Code	Type
DLA	1DL42A



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000707EAA

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