

TOSHIBA High Efficiency Rectifier (HED) Silicon Epitaxial Junction Type

1DL41A

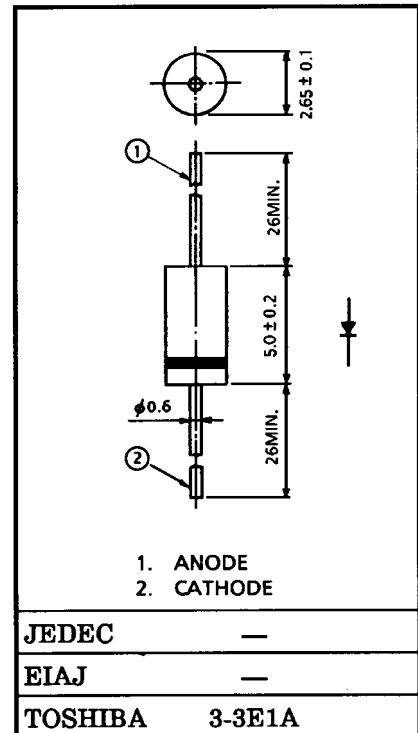
Switching Mode Power Supply Applications

- Repetitive Peak Reverse Voltage: $V_{RRM} = 200\text{ V}$
- Average Forward Current: $I_F (AV) = 1.0\text{ A}$ ($T_a = 64^\circ\text{C}$)
- 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

Characteristics	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	200	V
Average forward current ($T_a = 64^\circ\text{C}$)	$I_F (AV)$	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	$^\circ\text{C}$

Unit in mm



Weight : 0.225 g

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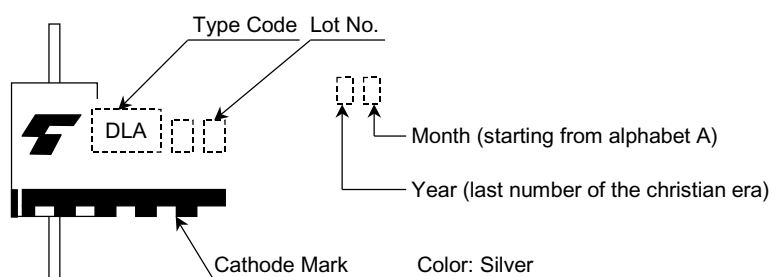
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Electrical Characteristics (Ta = 25°C)

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	μA
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
Thermal resistance	$R_{th(j-a)}$	Junction to Ambient	—	—	115	$^{\circ}\text{C}/\text{W}$
Thermal resistance	$R_{th(j-l)}$	Junction to Lead	—	—	45	$^{\circ}\text{C}/\text{W}$

Marking



Code	Type
DLA	1DL41A

