

TOSHIBA HIGH EFFICIENCY RECTIFIER (HED) SILICON EPITAXIAL JUNCTION TYPE

1R5DL41A

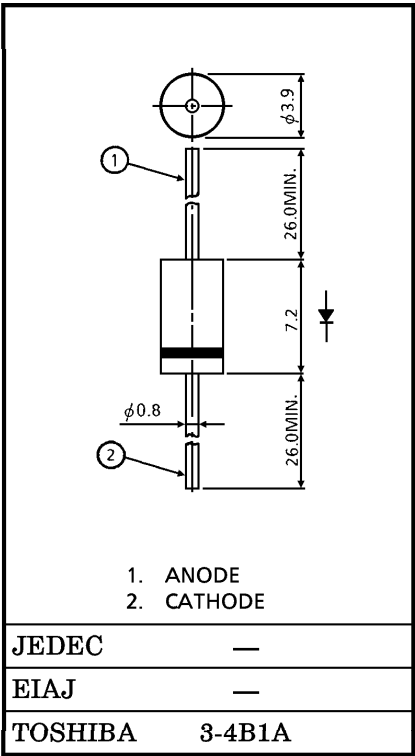
SWITCHING TYPE POWER SUPPLY APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage :  $V_{RRM} = 200\text{ V}$
- Average Forward Current :  $I_F (AV) = 1.5\text{ A}$  ( $T_a = 25^\circ\text{C}$ )
- 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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$V_{RRM}$	200	V
Average Forward Current ( $T_a = 25^\circ\text{C}$ )	$I_F (AV)$	1.5	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	$I_{FSM}$	60 (50 Hz) 66 (60 Hz)	A
Junction Temperature	$T_j$	$-40\sim 150$	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	$-40\sim 150$	$^\circ\text{C}$

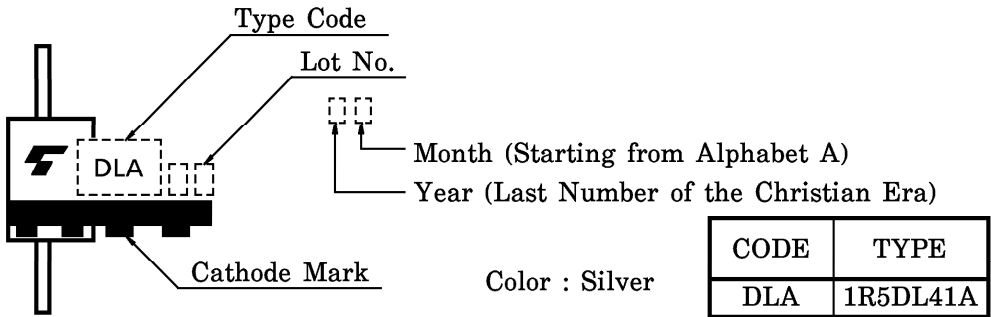


Weight : 0.47 g

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

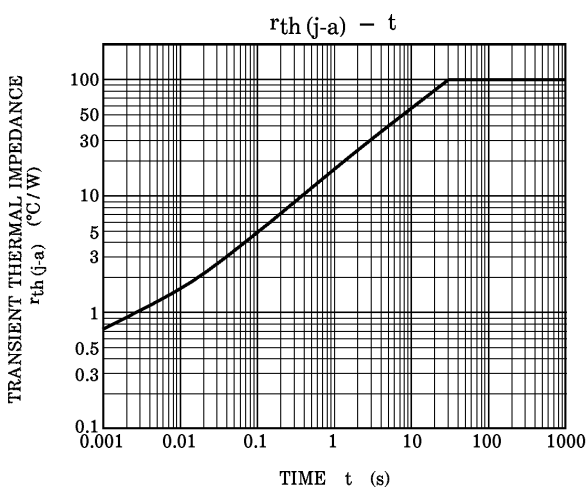
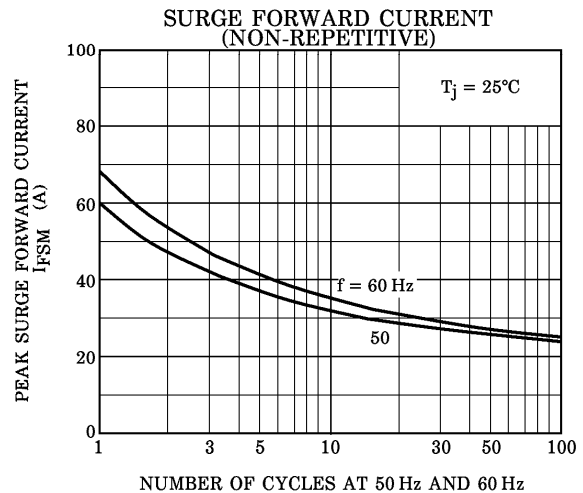
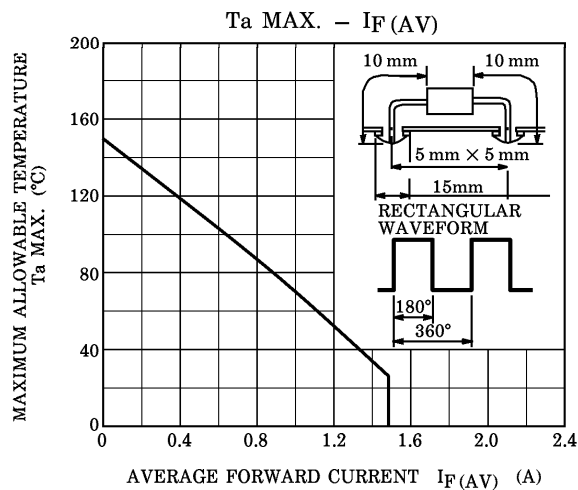
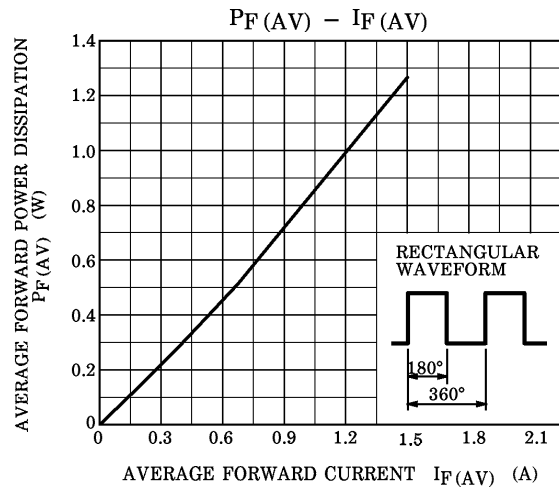
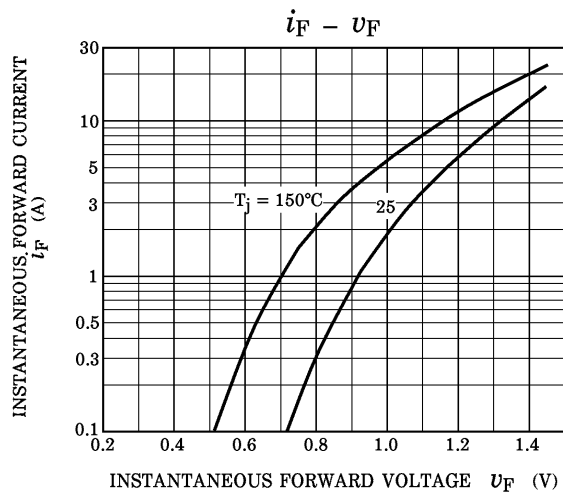
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 1.5\text{ A}$	—	—	0.98	V
Repetitive Peak Reverse Current	$I_{RRM}$	$V_{RRM} = 200\text{ V}$	—	—	100	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F = 1\text{ A}$ , $di/dt = -30\text{ A}/\mu\text{s}$	—	—	35	ns
Forward Recovery Time	$t_{fr}$	$I_F = 1.0\text{ A}$	—	—	100	ns
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	—	—	100	$^\circ\text{C}/\text{W}$
Thermal Resistance	$R_{th(j-l)}$	Junction to Lead	—	—	30	$^\circ\text{C}/\text{W}$

MARKING



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