

TOSHIBA HIGH EFFICIENCY RECTIFIER (HED) SILICON EPITAXIAL JUNCTION TYPE

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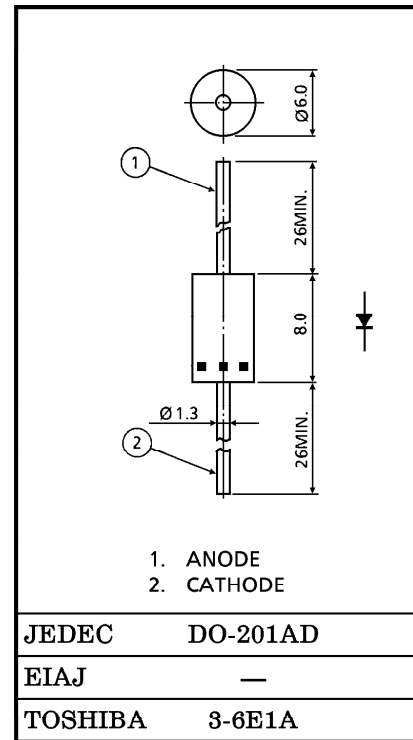
SWITCHING TYPE POWER SUPPLY APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM} = 200V$
- Average Forward Current : $I_F (AV) = 3.0A$
- Very Fast Reverse-Recovery Time : $t_{rr} = 35ns (Max.)$
- Low Forward Voltage : $V_{FM} = 0.98V (Max.)$
- Available to Raduce Switching Losses and Output Noise.

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Average Forward Current	$I_F (AV)$	3.0	A
Peak One Cycle Surge Forward Current (Non-Repetitive)	I_{FSM}	80 (50Hz)	A
		88 (60Hz)	
Junction Temperature	T_j	-40~150	°C
Storage Temperature	T_{stg}	-40~150	°C

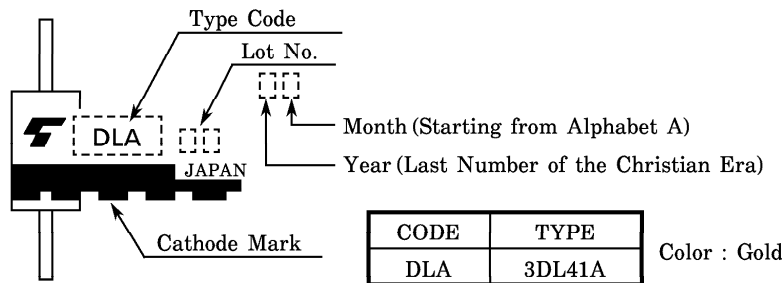


ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 1.18g

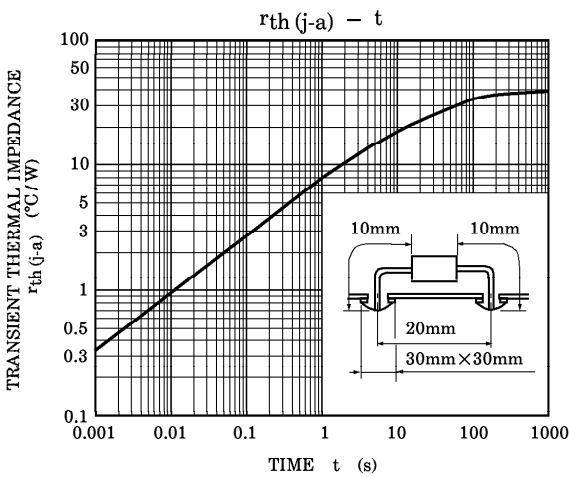
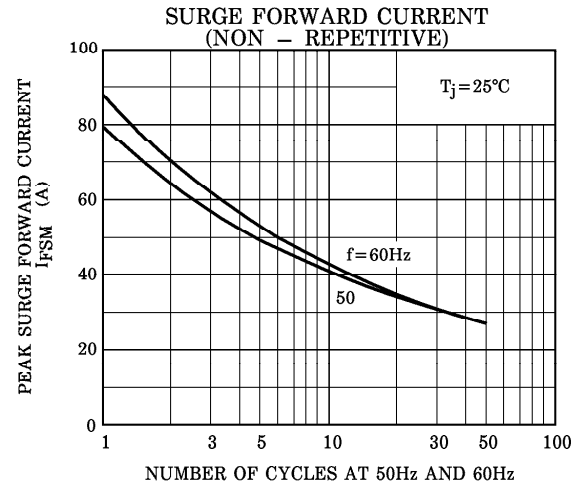
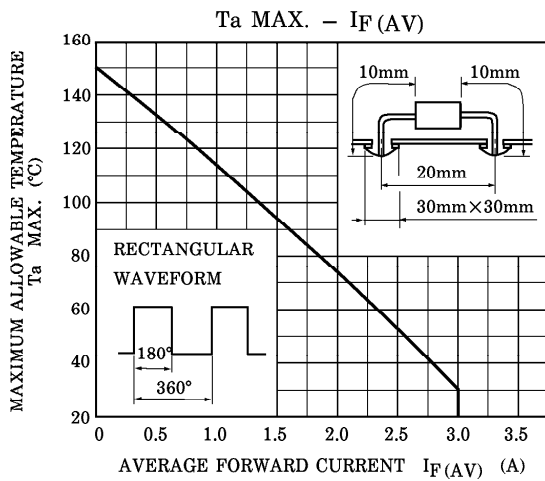
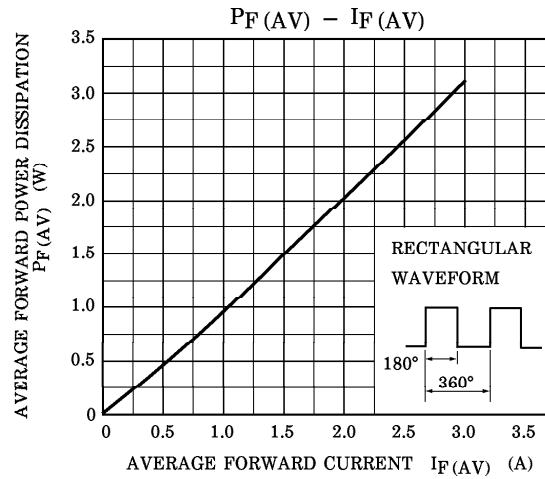
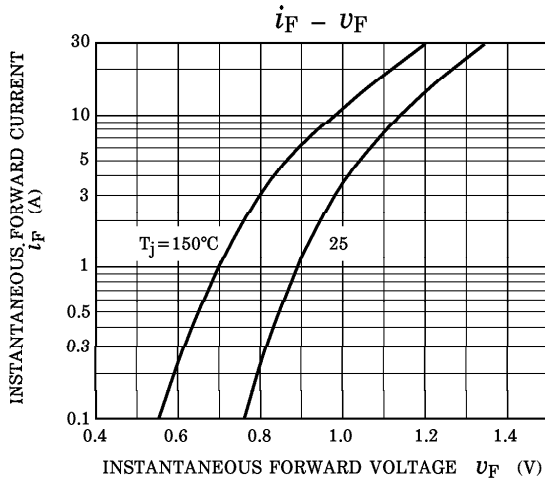
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	V_{FM}	$I_{FM} = 3.0A$	—	—	0.98	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM} = 200V$	—	—	100	μA
Reverse Recovery Time	t_{rr}	$I_F = 1A, di / dt = -30A / \mu s$	—	—	35	ns
Forward Recovery Time	t_{fr}	$I_F = 1.0A$	—	—	100	ns
Thermal Resistance	$R_{th (j-a)}$	Junction to Ambient	—	—	57	°C / W
Thermal Resistance	$R_{th (j-l)}$	Junction to Lead	—	—	18	°C / W

MARKING



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