

TOSHIBA Rectifier Silicon Diffused Type

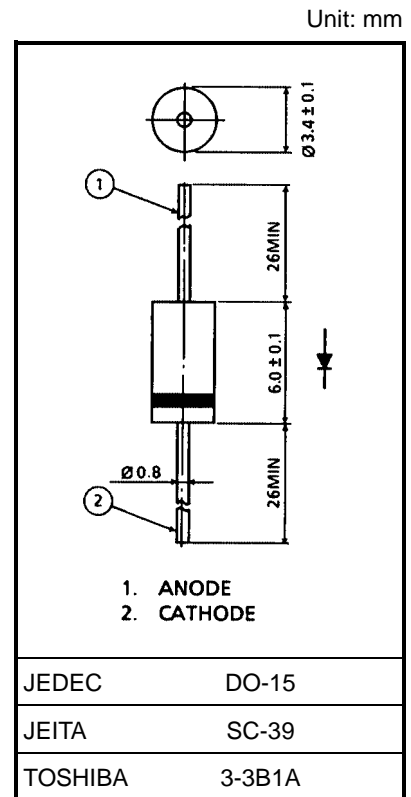
# 1S1830,1S1885,1S1887,1S1888

## General Purpose Rectifier Applications

- Average Forward Current:  $I_F (AV) = 1.0 \text{ A}$  ( $T_a = 65^\circ\text{C}$ )
- Repetitive Peak Reverse Voltage:  $V_{RRM} = 100 \text{ V}, 400 \text{ V}, 600 \text{ V}, 1000 \text{ V}$

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

Characteristics		Symbol	Rating	Unit
Repetitive peak reverse voltage	1S1885	$V_{RRM}$	100	V
	1S1887		400	
	1S1888		600	
	1S1830		1000	
Average forward current ( $T_a = 65^\circ\text{C}$ )		$I_F (AV)$	1.0	A
Peak one cycle surge forward current (non repetitive)	1S1830	$I_{FSM}$	45 (50 Hz)	A
			49 (60 Hz)	
	1S1885 1S1887 1S1888		60 (50 Hz)	
			66 (60 Hz)	
Junction temperature		$T_j$	-40 to 150	$^\circ\text{C}$
Storage temperature range		$T_{stg}$	-40 to 150	$^\circ\text{C}$

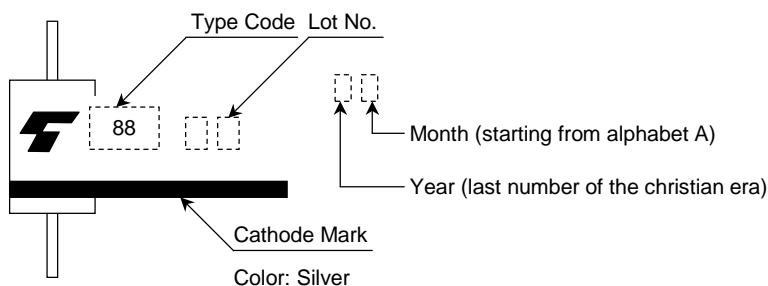


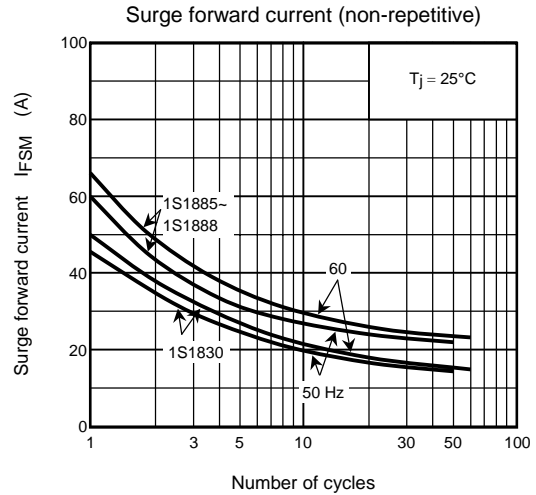
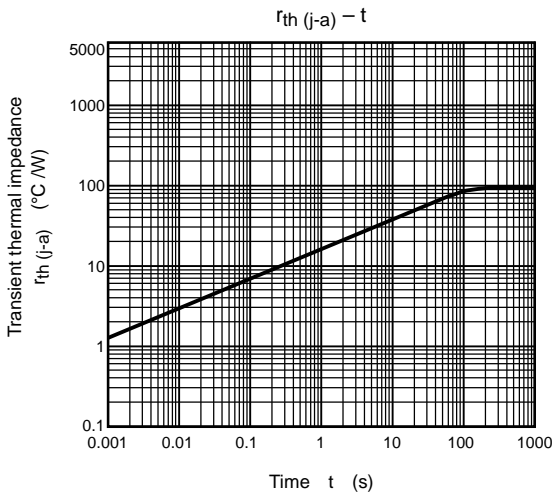
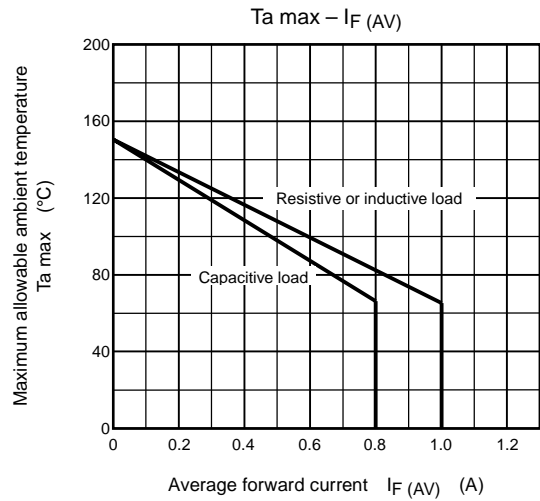
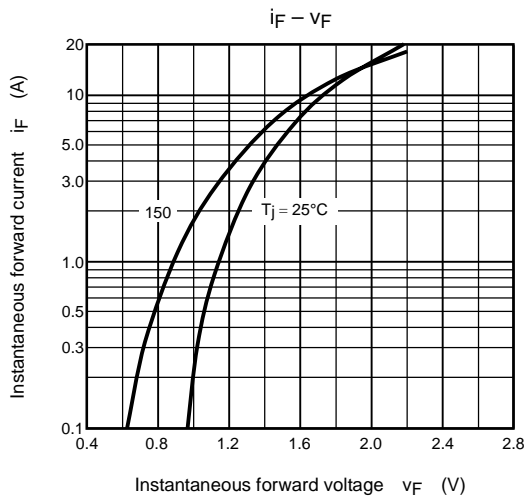
Weight: 0.42 g (typ.)

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

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Peak forward voltage	$V_{FM}$	$I_{FM} = 1.5 \text{ A}$	—	—	1.2	V
Repetitive peak reverse current	$I_{RRM} (1)$	$V_{RRM} = \text{Rated}$	—	—	10	$\mu\text{A}$
	$I_{RRM} (2)$	$V_{RRM} = \text{Rated}, T_j = 150^\circ\text{C}$	—	—	400	
Thermal resistance (junction to ambient)	$R_{th (j-a)}$	DC	—	—	100	$^\circ\text{C/W}$

## Marking





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