

TOSHIBA Rectifier Silicon Diffused Type

1S1834,1S1835

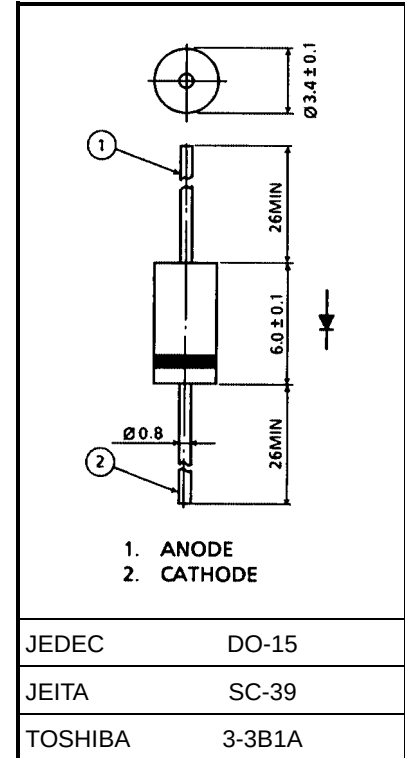
High Speed Rectifier Applications (fast recovery)

Unit: mm

- Average Forward Current: $I_F (AV) = 1.0 \text{ A}$ ($T_a = 50^\circ\text{C}$)
- Repetitive Peak Reverse Voltage: $V_{RRM} = 400, 600 \text{ V}$
- Reverse Recovery Time: $t_{rr} (1) = 1.5 \mu\text{s}$
 $t_{rr} (2) = 0.35 \mu\text{s}$
- Plastic Mold Type.

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

Characteristics		Symbol	Rating	Unit
Repetitive peak reverse voltage	1S1834	V_{RRM}	400	V
	1S1835		600	
Reverse voltage (DC)	1S1834	V_R	300	V
	1S1835		500	
Average forward current (Ta = 50°C)		I_F (AV)	1.0	A
Peak one cycle surge forward current (non repetitive)		I_{FSM}	60 (50 Hz)	A
			66 (60 Hz)	
Junction temperature		T_j	−40 to 125	°C
Storage temperature range		T_{stg}	−40 to 125	°C



Weight: 0.42 g (typ.)

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

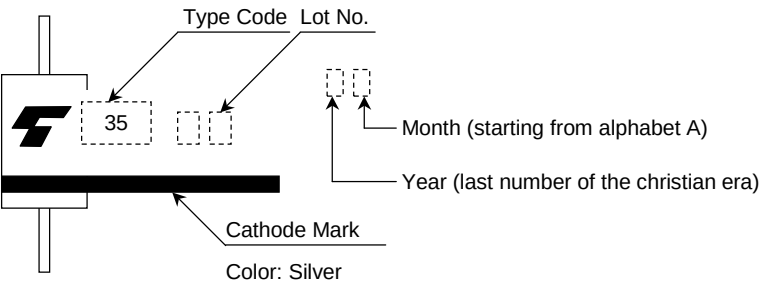
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Peak forward voltage	V_{FM}	$I_{FM} = 1.5 \text{ A}$	—	—	1.2	V
Repetitive peak reverse current	$I_{RRM} (1)$	$V_{RRM} = \text{Rated}$	—	—	10	μA
	$I_{RRM} (2)$	$V_{RRM} = \text{Rated}, T_j = 125^\circ\text{C}$	—	—	500	
Reverse recovery time	$t_{rr} (1)$	$I_F = 20 \text{ mA}, I_R = 1 \text{ mA}$	—	—	1.5	μs
	$t_{rr} (2)$	$I_F = 20 \text{ mA}, I_R = 20 \text{ mA}$	—	—	0.35	
Forward recovery voltage	V_{fr}	$I_F = 0.1 \text{ A}, t_r = 100 \text{ ns}, t_w = 5 \mu\text{s}$	—	—	6	V

Note 1: Lead diameter not controlled in this zone to allow for flash, lead finish build-up, and minor irregularities other than slugs.

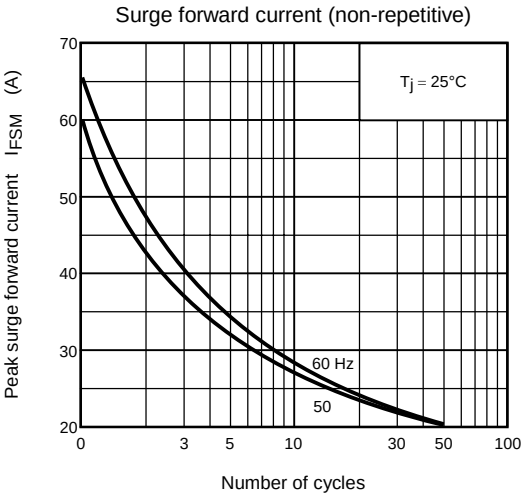
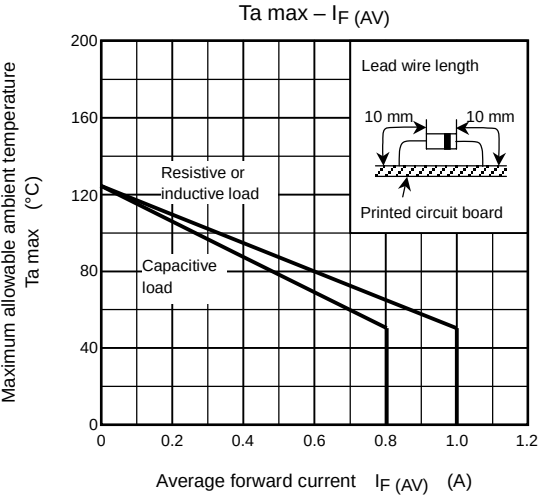
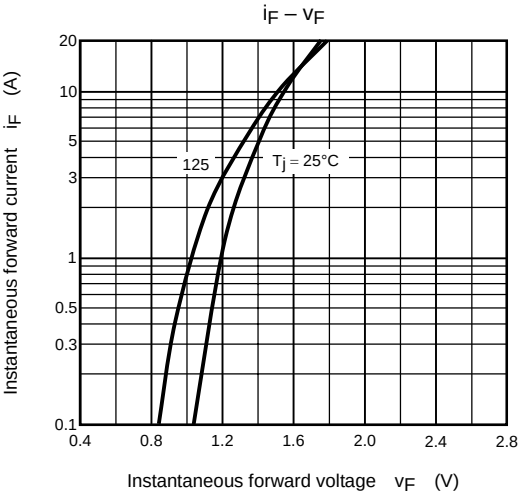
Note 2: Soldering: 5 mm is the minimum to be kept between case and soldering part.

Note 3: Lead bending: 5 mm is the minimum to be kept from the case when bend the lead wire.

Marking



Code	Type
34	1S1834
35	1S1835



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000707EAA

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