Unit in mm

TOSHIBA RECTIFIER SILICON DIFFUSED TYPE

1**51834, 1**51835

HIGH SPEED RECTIFIER APPLICATIONS (FAST RECOVERY)

 $: I_{F(AV)} = 1.0 \text{ A (Ta} = 50^{\circ}\text{C)}$ Average Forward Current

Repetitive Peak Reverse Voltage: VRRM = 400~600 V

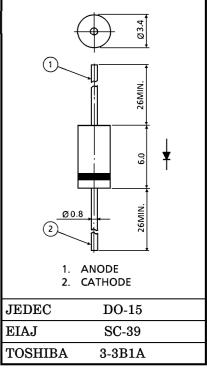
Reverse Recovery Time : $t_{rr(1)} = 1.5 \,\mu s$

 $t_{rr(2)} = 0.35 \,\mu s$

Plastic Mold Type.

MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATINGS	UNIT	
Repetitive Peak Reverse	1S1834	Vans	400	V	
Voltage	1S1835	V_{RRM}	600		
Reverse Voltage (DC)	1S1834	17-	300	V	
	1S1835	$v_{ m R}$	500		
Average Forward Current (Ta = 50°C)		I _{F (AV)}	1.0	A	
Peak One Cycle Surge Forward		_	60 (50 Hz)	A	
Current (Non Repetitive)		I_{FSM}	66 (60 Hz)		
Junction Temperature		T_{j}	-40~125	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-40~125	$^{\circ}\mathrm{C}$	



Weight: 0.42 g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Peak Forward Voltage	v_{FM}	$I_{\text{FM}} = 1.5 \text{ A}$	_	_	1.2	V	
Repetitive Peak Reverse	IRRM (1)	$V_{RRM} = Rated$	_	_	10		
Current	$I_{RRM(2)}$	$V_{RRM} = Rated, T_j = 125$ °C		_	500	$\mu \mathbf{A}$	
Reverse Recovery Time	$t_{rr(1)}$	$I_{ m F}=20{ m mA},~I_{ m R}=1{ m mA}$	_	_	1.5		
	$t_{rr}(2)$	$I_{ m F} = 20 { m mA}, \; I_{ m R} = 20 { m mA}$	_	_	0.35	μ s	
Forward Recovery Voltage	$v_{ m fr}$	$egin{aligned} { m I_F} &= 0.1 { m A, \ t_r} = 100 { m ns,} \ { m t_w} &= 5 \mu { m s} \end{aligned}$	_	_	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.

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TYPE

1S1834

1S1835

34

35

