TOSHIBA

TOSHIBA HIGH EFFICIENCY RECTIFIER (HED) SILICON EPITAXIAL JUNCTION TYPE

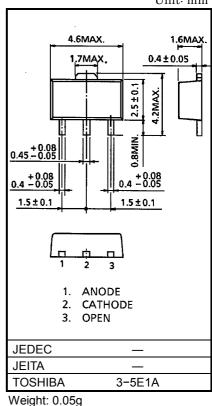
U1DL49

SWITCHING MODE POWER SUPPLY APPLICATIONS

- Repetitive Peak Reverse Voltage : V_{RRM} = 200V
- Average Forward Current $: I_F (AV) = 1.0A$ •
- Very Fast Reverse-Recovery Time: trr = 60ns (Max) •
- Low Forward Voltage $V_{FM} = 0.98V (Max)$
- Available to Reduce Switching Losses and Output Noise •

MAXIMUM RATINGS (Ta = 25°C)

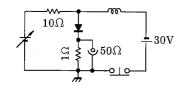
CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive Peak Reverse Voltage	V _{RRM}	_{RM} 200		
Average Forward Current	I _{F (AV)}	1.0	А	
Peak One Cycle Surge Forward Current (Non-Repetitive)	I _{FSM}	15 (50Hz)	A	
		16.5 (60Hz)		
Junction Temperature	Tj	-40~150	°C	
Storage Temperature Range	T _{stg}	-40~150	°C	



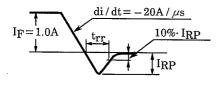
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	0	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Peak Forward Voltage		V _{FM}	I _{FM} = 1.0A	-	_	0.98	V
Repetitive Peak Reverse Cu	irrent	I _{RRM}	V _{RRM} = 200V	_		10	μA
Reverse Recovery Time	(Note 1)	t _{rr}	I _F = 1A, di / dt = -20A / μs	_	_	60	ns
Forward Recovery Time	(Note 2)	t _{fr}	I _F = 1.0A	_	_	100	ns
Thermal Resistance		R _{th (j−a)}	Junction to Ambient	_	_	125	°C/W

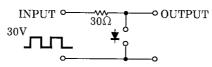
Note 1: trr TEST CIRCUIT

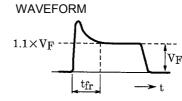


WAVEFORM

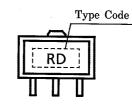








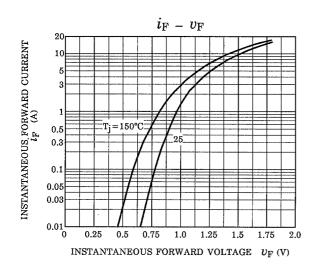
MARKING

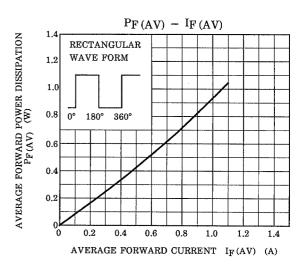


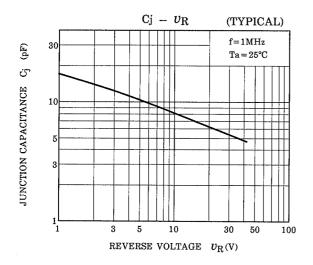
CODE	TYPE
RD	U1DL49

Unit: mm

TOSHIBA







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