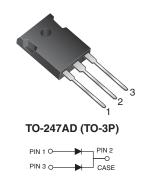


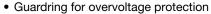
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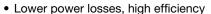
Dual Common-Cathode Schottky Rectifier



PRIMARY CHARACTERISTICS				
V_{RRM}	30 V, 40 V			
I _{FSM}	250 A			
V _F	0.55 V			
T _J max.	125 °C			

FEATURES





· Low forward voltage drop

· High forward surge capability

· High frequency operation

• Solder dip 275 °C max., 10 s, per JESD 22-B106

• Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

TYPICAL APPLICATIONS

For use in low voltage, high frequency rectifier of switching mode power supplies, freewheeling diodes, DC/DC converters or polarity protection application.

MECHANICAL DATA

Case: TO-247AD (TO-3P)

Molding compound meets UL 94V-0 flammability rating

Base P/N-E3 - RoHS-compliant, commercial grade

Terminals: Matte tin plated leads, solderable per

J-STD-002 and JESD 22-B102

E3 suffix meets JESD 201 class 1A whisker test

Polarity: As marked

Mounting Torque: 10 in-lbs maximum

MAXIMUM RATINGS (T _A = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	SBL2030PT	SBL2040PT	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	30	40	V	
Maximum RMS voltage	V_{RWM}	21	28	V	
Maximum DC blocking voltage	V _{DC}	30	40	V	
Maximum average forward rectified current (Fig.1)	I _{F(AV)}	20		Α	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode	I _{FSM}	250		А	
Operating junction and storage temperature range	T _J , T _{STG}	- 40 to + 125		°C	

ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	SYMBOL	TEST CONDITIONS		SBL2030PT	SBL2040PT	UNIT
Maximum instantaneous forward voltage per diode	V _F ⁽¹⁾	10 A		0.55		V
Maximum instantaneous reverse current at	- I I I I I I I I I I I I I I I I I I I	T _C = 25 °C		1.	.0	mA
rated DC blocking voltage per diode			T _C = 100 °C	5	0	mA

(1) Pulse test: 300 µs pulse width, 1 % duty cycle



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THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	SYMBOL	SBL2030PT	SBL2040PT	UNIT		
Thermal resistance, junction to case per diode	$R_{ heta JC}$	1.5		°C/W		

ORDERING INFORMATION (Example)						
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE	
TO-247AD	SBL2030PT-E3/45	6.13	45	30/tube	Tube	

RATINGS AND CHARACTERISTICS CURVES ($T_A = 25$ °C unless otherwise noted)

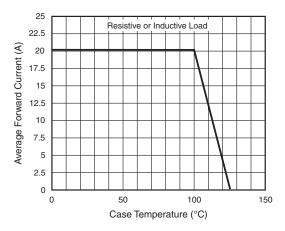


Fig. 1 - Forward Current Derating Curve

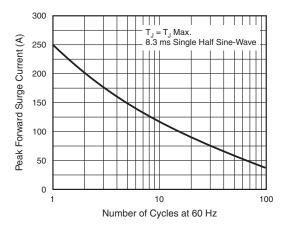


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

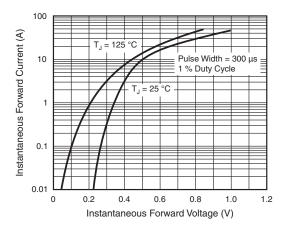


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

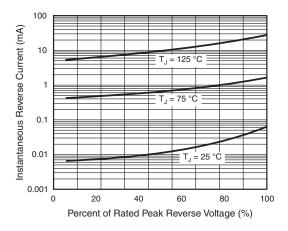


Fig. 4 - Typical Reverse Characteristics Per Diode





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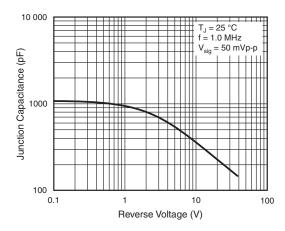


Fig. 5 - Typical Junction Capacitance Per Diode

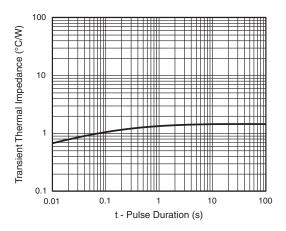
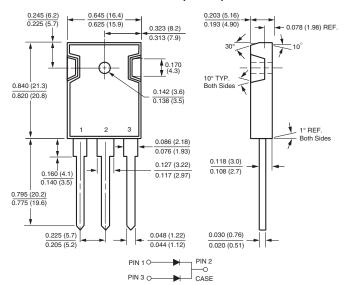


Fig. 6 - Typical Transient Thermal Impedance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

TO-247AD (TO-3P)





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Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

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