

PTA3L100

PFC Device Corporation

3A 100V HPTR® Schottky Rectifier

Major ratings and characteristics

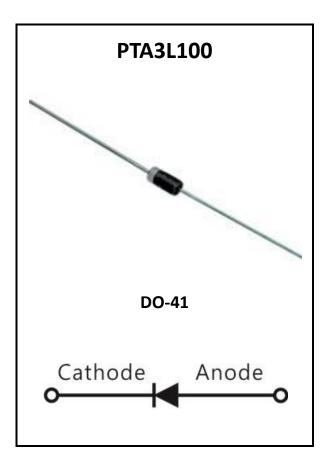
Characteristics	Values	Units	
I _{F(AV)} Rectangular	З	А	
Waveform	5		
V _{RRM}	100	V	
V _F @ 3A , Tj=125 °C	0.65	V, typ.	
T _J Operating Junction	40 to 1150	°C	
Temperature	-40 to +150		

Features

- Reliable High Temperature Operation
- Softest, fast switching capability
- 150°C Operating Junction Temperature
- Lead Free Finish, RoHS Compliant

Typical Applications

Device optimized for low forward voltage drop to maximize efficiency in Power Supply applications



1. Characteristics

Parameter	Symbol	Values	Units
DC Blocking Voltage	V _{RM}		
Working Peak Reverse Voltage	V _{RWM}	100	Volts
Peak Repetitive Reverse Voltage	V _{RRM}		
Average Rectified Forward Current		3	Amps
(Rated VR-20Khz Square Wave) - 50% duty cycle	I _o		
Peak Forward Surge Current - 1/2 60hz	I _{FSM}	80	Amps
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I _{RRM}	1	Amps
Typical Thermal Resistance	Rθ _{JA}	80	°C / W
Maximum Rate of Voltage Change (at Rated VR)	dv/dt	10000	V/uS
Operating Junction Temperature	Tj	- 40 to +150	
Storage Junction Temperature	T _{STG}		

Electrical Characteristics

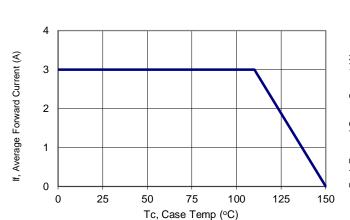
($T_A = 25$ °C unless otherwise specified)

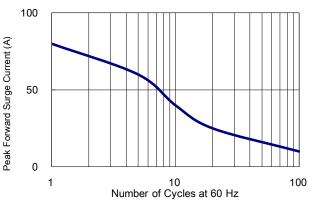
Parameter	Test Conditions		Symbol	Тур.	Max.	Units
Instantaneous		T _J = 25 ^o C	<u>\/</u> _*		0.78	Valta
Forward Voltage	IF = 3 A	T _J = 125 °C	VF*	0.65	0.69	Volts
Instantaneous	At V _{RM}	T _J = 25 ^o C	IR*		200	uA
Reverse Current		T _J = 125 ^o C		5	30	mA
* Pulse width < 300 uS, Duty cycle < 2%						



2. Characteristics Curves

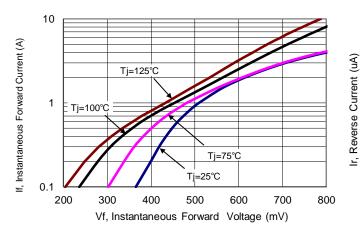
Ratings and Characteristics Curves





(TA = 25° C unless otherwise specified)







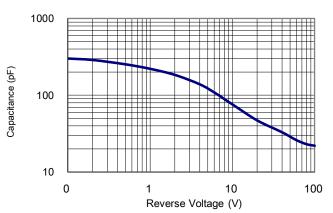


Figure 5: Typical Junction Capacitance



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Figure 2: Maximum Repetitive Surge Current

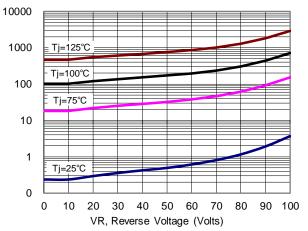
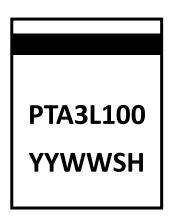


Figure 4: Typical Reverse Current

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3. Marking information

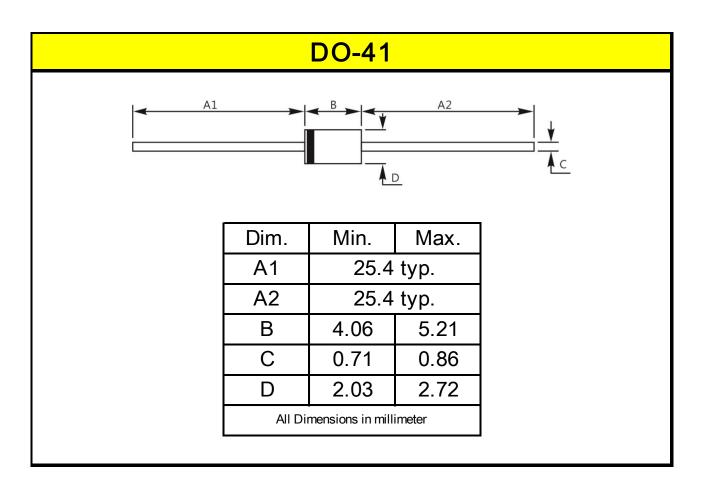
Top Marking Rule



PTA3L100 = Product Type Marking Code YYWW = Date Code YY = Last two digits of year WW = Week code S = Series Number H = Halogen Free (N/A = common molding compound)

4. Package information

Package Outline Dimensions millimeters





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5. Ordering information

Part Number	Package	Delivery mode
PTA3L100	DO-41	3000 pieces / ammo-pack

Note: For Halogen Free molding compound, add "H" suffix to part number above.

Mechanical

- Molder Plastic: UL Flammability Classification Rating 94V-0
- Device Weight : 0.01 ounces (0.3grams) DO-41

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