

FEATURES

- | Low Cost

- | Diffused Junction

- | Low Forward Voltage Drop

- | Low Reverse Leakage Current

- | High Current Capability



DO-41

MECHANICAL DATA

- | Case : Jedec DO-41 Package

- | Polarity: Color Band Denotes Cathode

- | Mounting Position : Any

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	RL251	RL252	RL253	RL254	RL255	RL256	RL257	Unit
Marking		RL251	RL252	RL253	RL254	RL255	RL256	RL257	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current at T _A =70°C	I _{F(AV)}	2.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave	I _{FSM}	70							
Maximum Peak Forward Voltage at 2.5A DC	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _J =25°C							μA
		T _J =100°C							
Typical Junction Capacitance (Note1)	C _J	25							pF
Typical Thermal Resistance (Note2)	R _{θJA}	30							°C/W
Operating Junction and Storage Temperature Rang	T _J , T _{STG}	-55~+125							°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C
2. Thermal resistance junction of ambient.

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

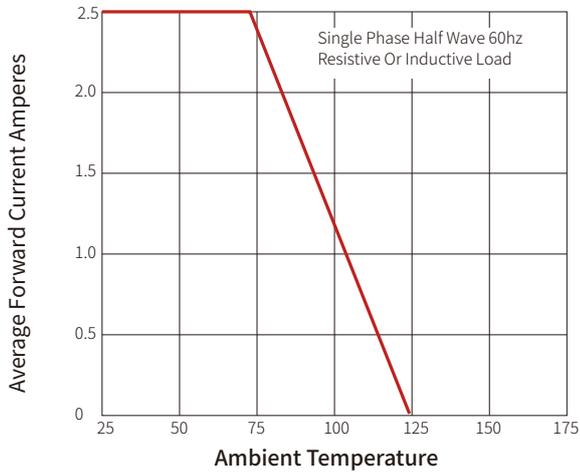


Fig.2 Maximum Non-repetitive Surge Current

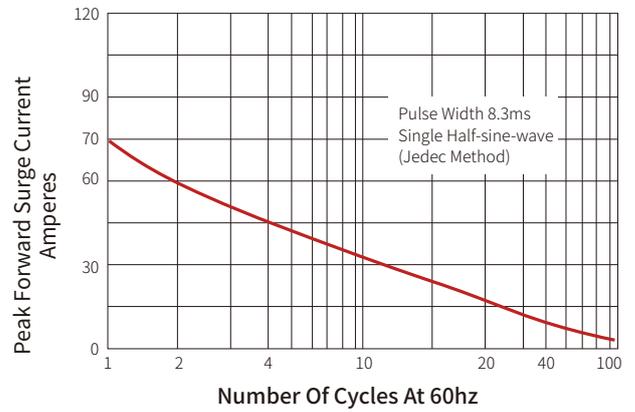


Fig.3 Typical Junction Capacitance

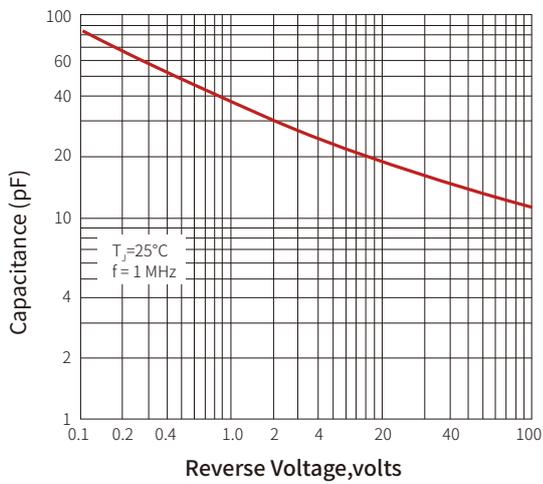
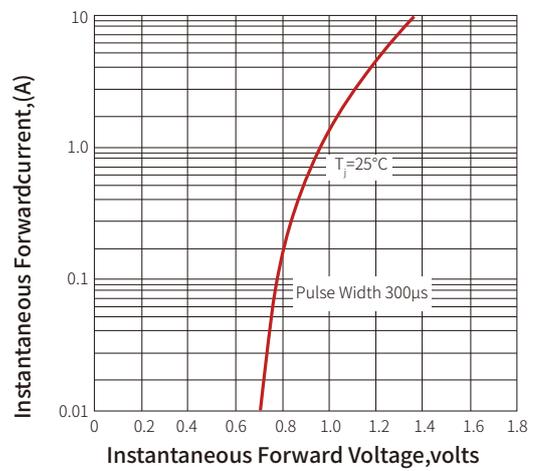
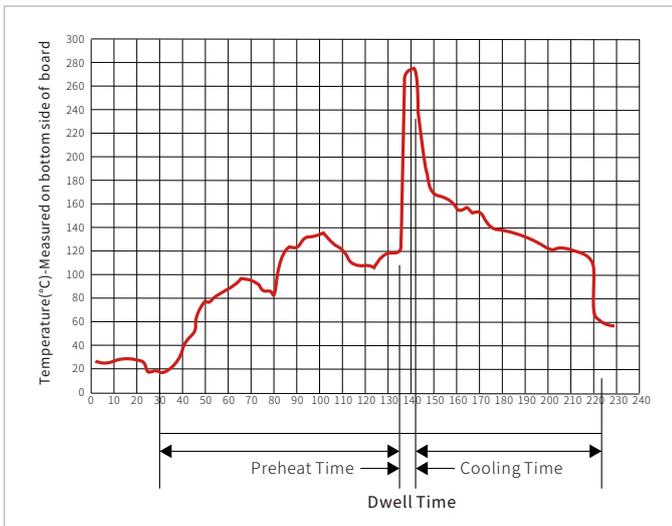


Fig.4 Typical Forward Characteristics

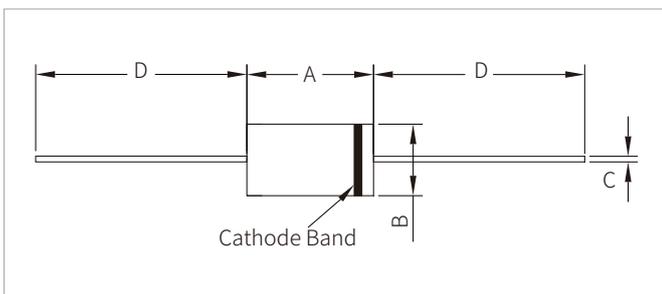


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

DO-41 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.10	5.20	0.160	0.205
B	2.00	2.70	0.080	0.107
C	0.71	0.86	0.028	0.034
D	25.40	-	1.000	-

ORDERING INFORMATION

Part Number	Component Package	Per Carton	Description
RL251-RL257	DO-41	5000pcs	Box

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code

Website



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