



SPECIFICATION FOR DP SERIES

PART NAME: [DP3100](#)

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江苏东光微电子股份有限公司

Jiangsu Dongguang Micro-electronics Co.,Ltd.

江苏省宜兴市环保科技工业园绿园路 42 号

42 Luyuan Road,Yingxing Industrial Park For Environment Science & Technology,Jiangsu Province

Tel : +86-510-87136808、871368911、87138917 Fax : +86-510-87136809、87136804

E-mail :yingxiao@jsdgme.com

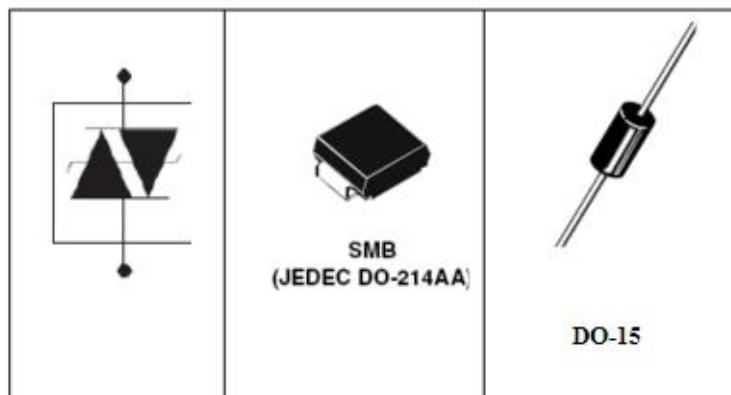
[Http://www.jsdgme.com](http://www.jsdgme.com)

■ MAIN FEATURE

- Bidirectional Short Protect
- Low Capacitance
- Leaks slightly
- ROHS Environmental protection

■ DESCRIPTION

- Mostly Applied Electromagnetic Protection Equipment Protect
as: modems,line cards,CPE and so on .



■ Electricity Characteristic

model \ parameter	V _{DRM} (V)	V _S (V)	V _T (V)	I _{DRM} (μA)	I _S (mA)	I _T (A)	I _H (mA)	C ₀ (PF)
DP3100	275	350	4	5	800	2.2	150	45

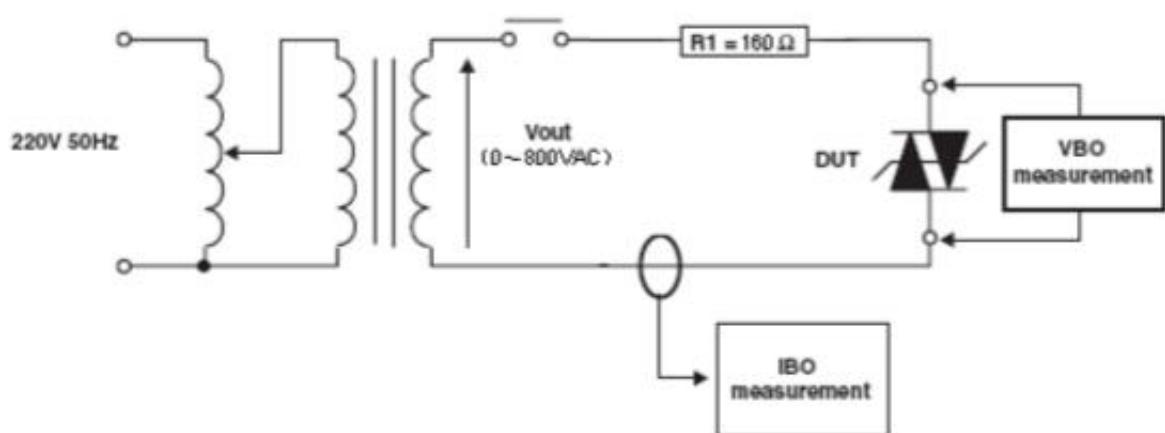
■ Surge Criterion

Series	I_{PP} $10 \times 700 \mu s$ A	I_{PP} $10 \times 1000 \mu s$ A	I_{TSM} <u>60Hz</u> A	di/dt A/ μs
A	50	45	20	500
B	100	80	30	500
C	150	100	60	500

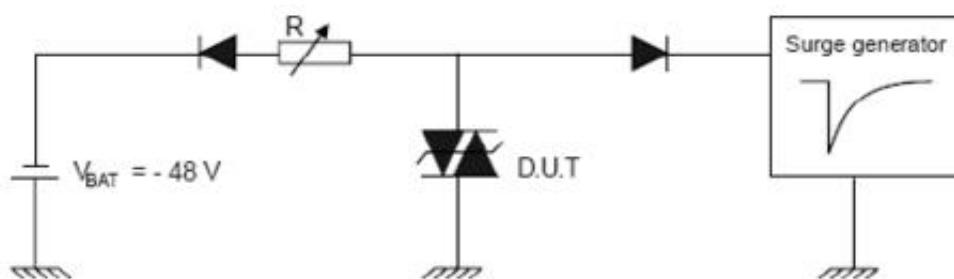
■ Heat Characteristic

Emblem	parameter	numerical value	unit
T_J	Task scope	-40~+150°C	°C
T_S	Temperature save up scope	-65~+150°C	°C
$R_{θ JA}$	Heat resistance	90	°C/W

■ Direct current VBO test circuit



■ IH parameter test circuit

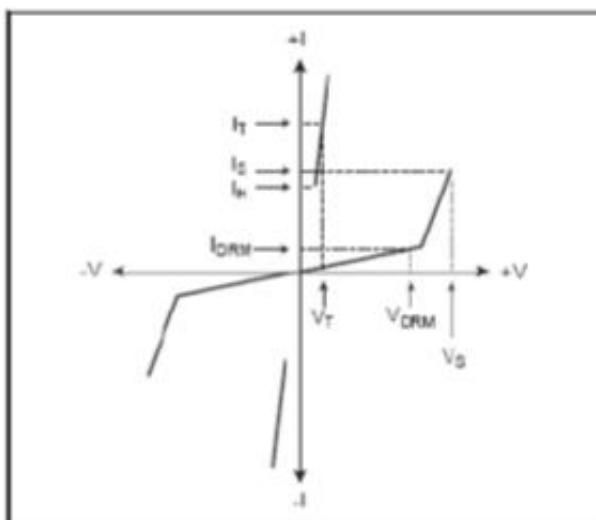


This is a GO-NO GO test which allows to confirm the holding current (I_H) level in a functional test circuit.

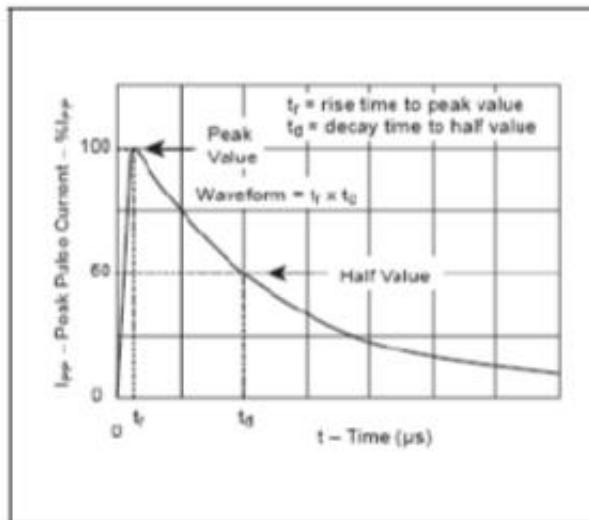
TEST PROCEDURE :

- Adjust the current level at the I_H value by short circuiting the D.U.T.
- Fire the D.U.T. with a surge current : $I_{pp} = 10A$, $10/1000 \mu s$.
- The D.U.T. will come back to the off-state within 50 ms max.

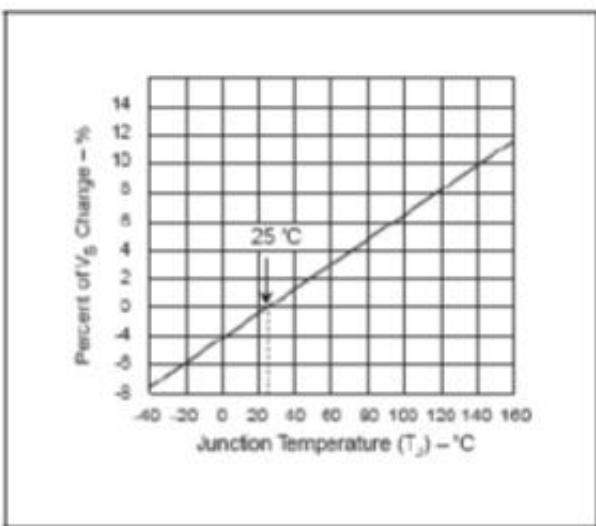
■ Characteristic Curve



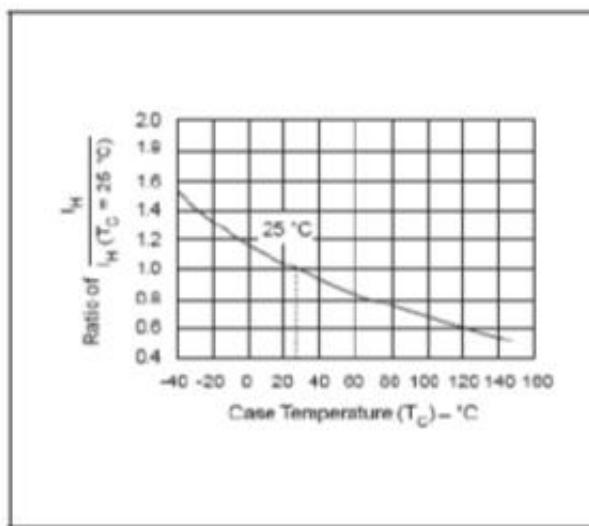
V-I Characteristics



$t_r \times t_d$ Pulse Wave-form



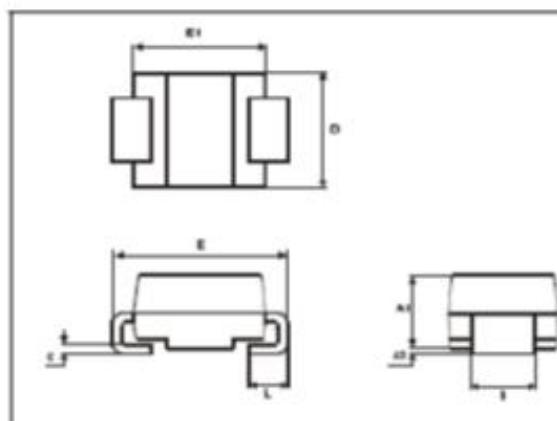
Normalized V_S Change versus Junction Temperature



Normalized DC Holding Current versus Case Temperature

■ Encapsulation Dimension

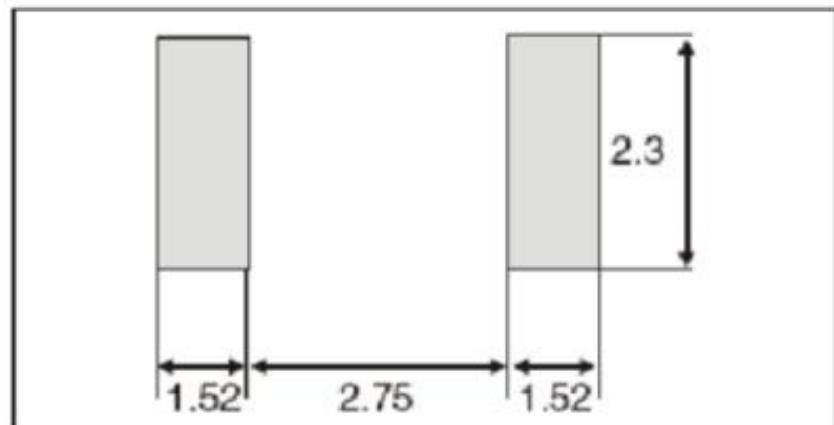
● DO-214AA



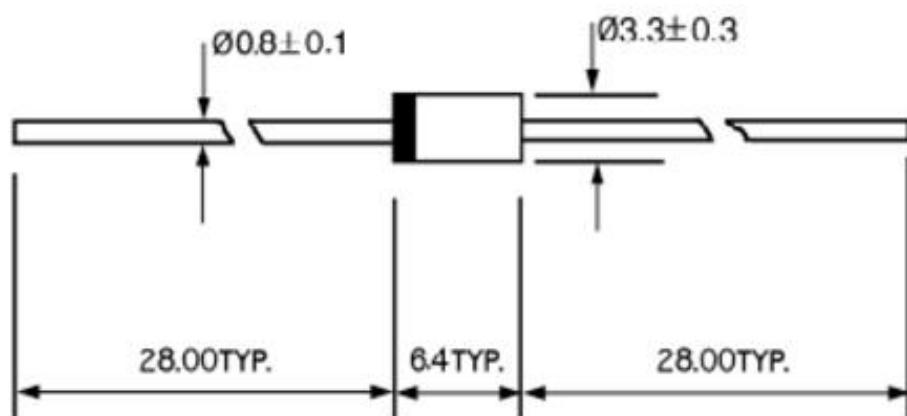
The diagram shows three views of the component footprint. The top view is a side cross-section with dimensions E (width), a (height), and c (depth). The bottom-left view is a top-down cross-section with dimensions L (length), s (width), and t (depth). The bottom-right view is a detailed side view of the lead structure.

REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A1	1.90	2.45	0.075	0.096
A2	0.05	0.20	0.002	0.008
b	1.95	2.20	0.077	0.087
c	0.15	0.41	0.006	0.016
E	5.10	5.60	0.201	0.220
E1	4.05	4.60	0.159	0.181
D	3.30	3.95	0.130	0.156
L	0.75	1.60	0.030	0.063

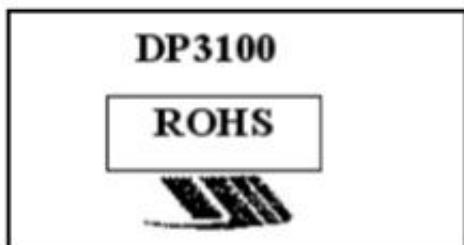
Foot Print Dimensions(in millimeters)



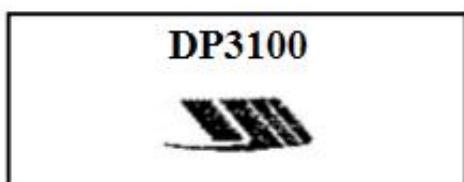
●DO-15



■ P/N (outside wrapping marking)



■ The main body marks



■ Naming rule

