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SPECIFICATION FOR DP SERIES

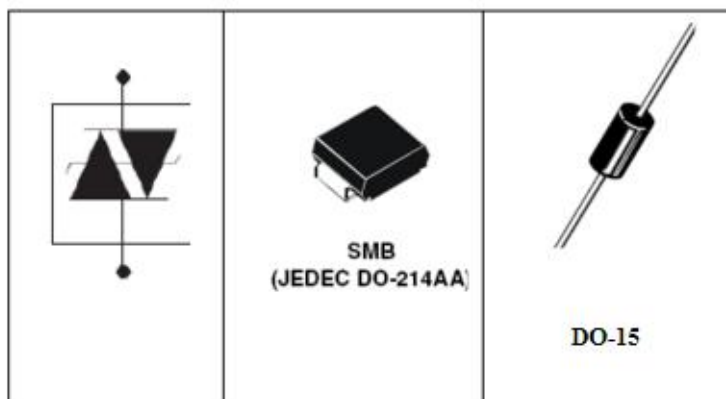
PART NAME: DP3100

ISSUE DATE: 2007-8-1

Establishment: David

■ MAIN FEATURE

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



■ DESCRIPTION

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

■ Eletricity Characteristic

parameter model	V_{DRM} (V)	V_S (V)	V_T (V)	I_{DRM} (μA)	I_S (mA)	I_T (A)	I_H (mA)	C_o (PF)
DP3100	275	350	4	5	800	2.2	150	45

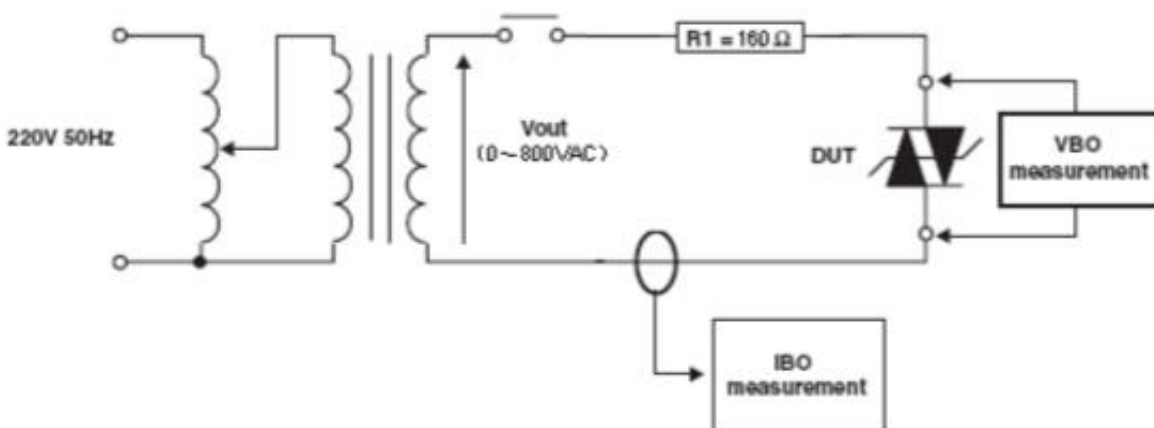
■ Surge Criterion

Series	I_{PP} 10*700 μ s A	I_{PP} 10*1000 μ s A	I_{TSM} 60Hz A	di/dt A/ μ s
A	50	45	20	500
B	100	80	30	500
C	150	100	60	500

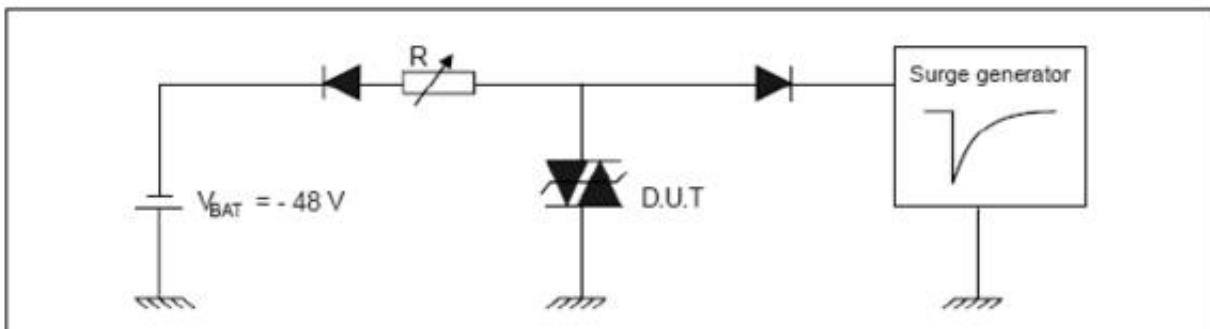
■ Heat Characteristic

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

■ Direct current VBO test circuit



■ IH parameter test circuit

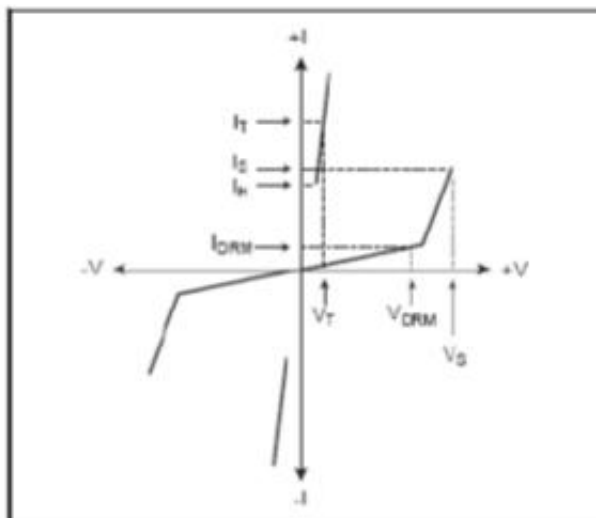


This is a GO-NO GO test which allows to confirm the holding current (I_H) level in a functional test circuit.

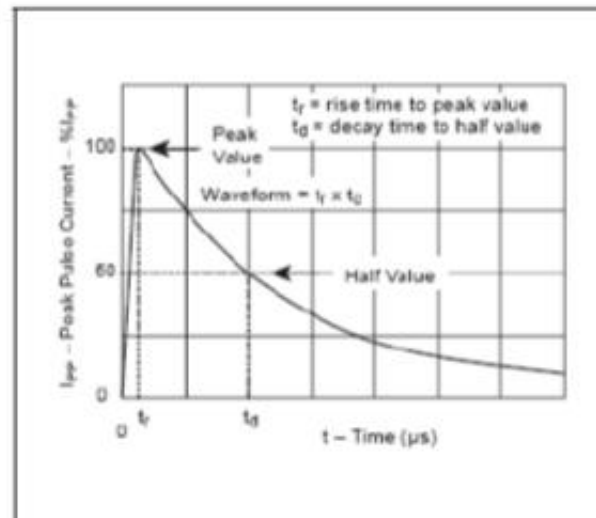
TEST PROCEDURE :

- 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.

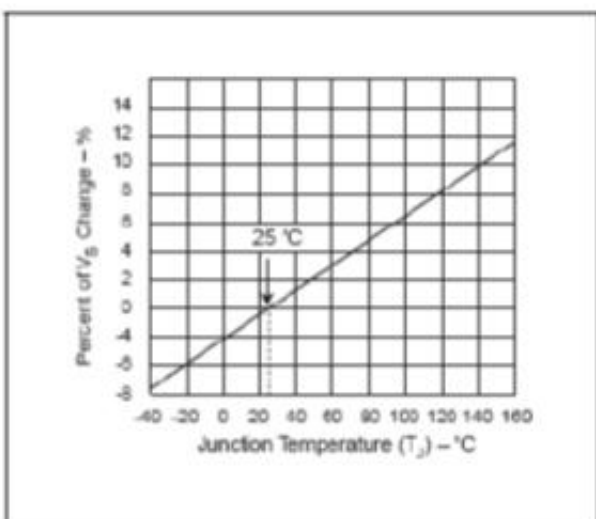
■ Characteristic Curve



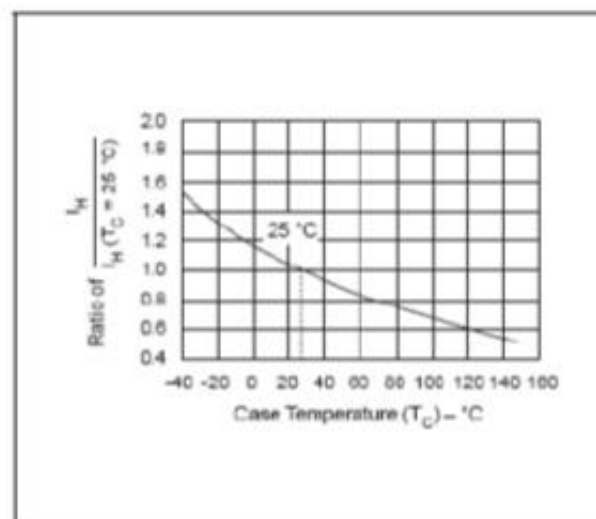
V-I Characteristics



$t_r \times t_d$ Pulse Wave-form



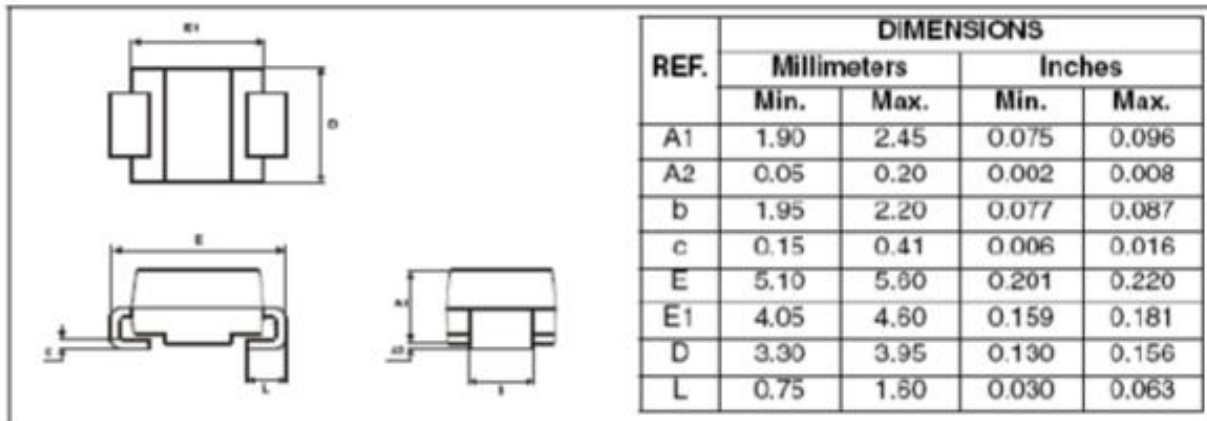
Normalized V_S Change versus Junction Temperature



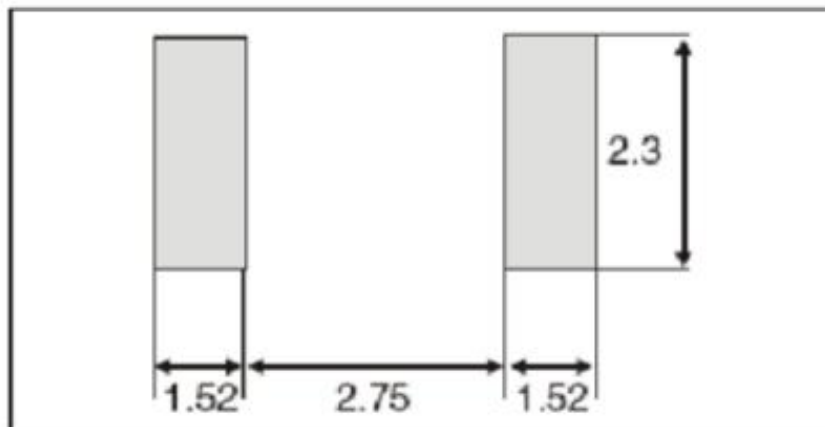
Normalized DC Holding Current versus Case Temperature

■ Encapsulation Dimension

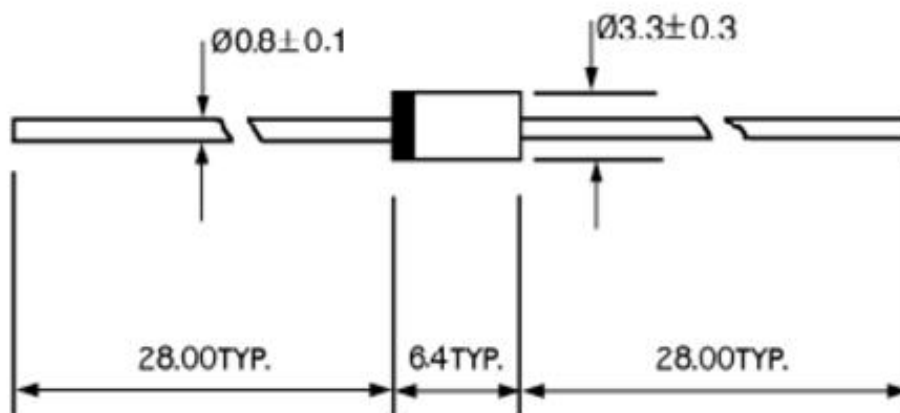
● DO-214AA



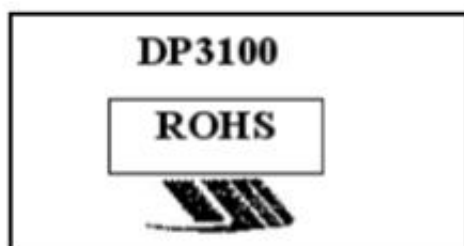
Foot Print Dimensions(in millimeters)



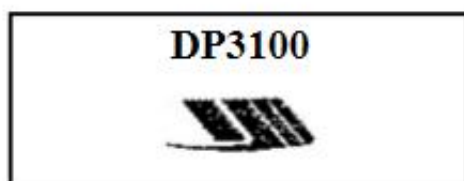
● DO-15



■ P/N (outside wrapping marking)



■ The main body marks



■ Naming rule

