



**Maximum Ratings and Electrical Characteristics** Rating at 25°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

**Maximum Ratings:**

Type Number	Symbol	RDBF31 (H)	RDBF32 (H)	RDBF34 (H)	RDBF36 (H)	RDBF38 (H)	RDBF310 (H)	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{DC}$	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Average Rectified Output Current (Note 2) @ $T_A = 120^\circ\text{C}$	$I_O$	3.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100						A

**Electrical Characteristics:**

Type Number	Symbol	RDBF31 (H)	RDBF32 (H)	RDBF34 (H)	RDBF36 (H)	RDBF38 (H)	RDBF310 (H)	Unit
Forward Voltage (per element) @ $I_F = 3.0\text{A}$	$V_F$	1.3						V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_R$	5.0 500						$\mu\text{A}$
Typical Junction Capacitance(per leg) (Note 4)	$C_J$	45						pF
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	41.5						$\text{A}^2\text{s}$
Maximum reverse recovery time (Note 3)	$T_{RR}$	150		250		500		ns

**Thermal-Mechanical Specifications:**

Type Number	Symbol	RDBF31 (H)	RDBF32 (H)	RDBF34 (H)	RDBF36 (H)	RDBF38 (H)	RDBF310 (H)	Unit
Typical Thermal Resistance (per leg)(Note 5)	$R_{\theta JA}$ $R_{\theta JC}$	15 5						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150						$^\circ\text{C}$

Note:1. "H": Halogen Free.

2. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.
3. Reverse Recovery Test Conditions:  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $IRR = 0.25\text{A}$ .
4. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
5. Mounted on 15 mm\*12 mm\*1.6 mm AL pad attach 195 mm\*110 mm\*10 mm steel plate

**Technical Data  
Data Sheet N1925, Rev. -**

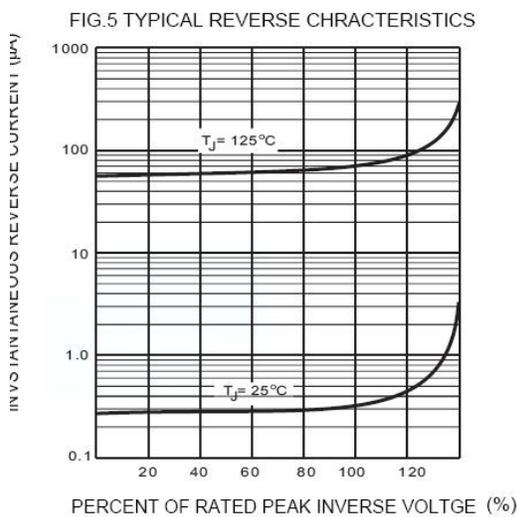
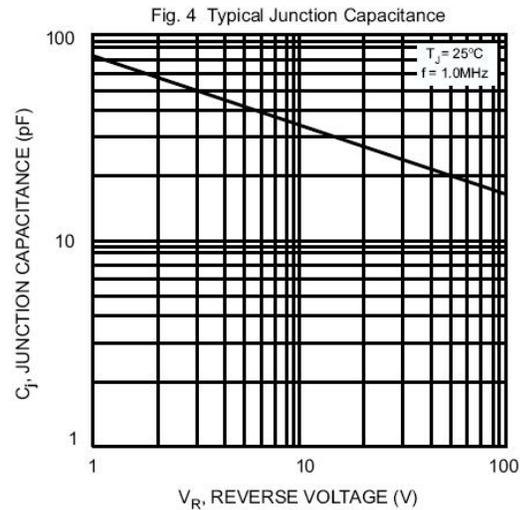
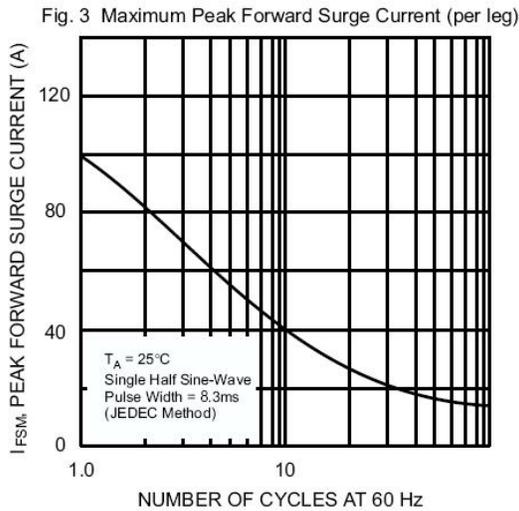
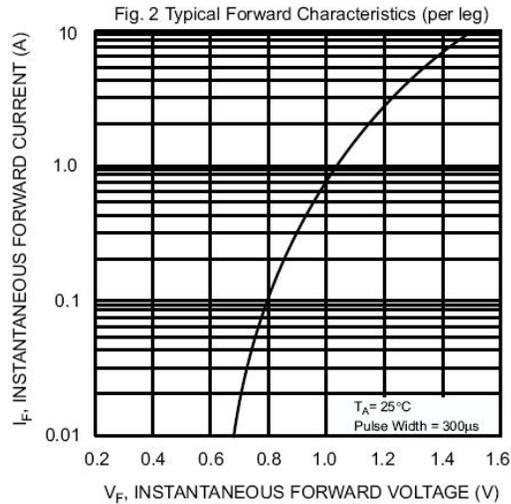
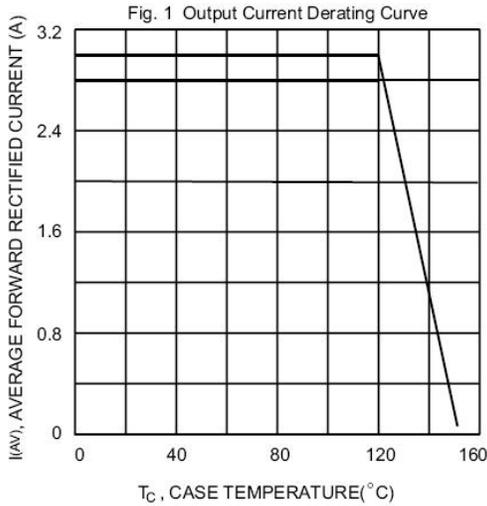
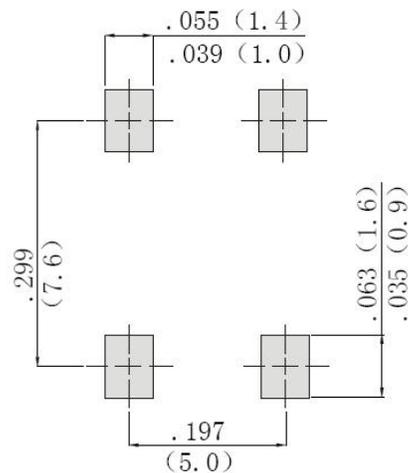


FIG.6 MOUNTING PAD LAYOUT



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