

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Bridge Rectifier
DFS

DFS

SPECIFICATION

68B	DF__Sxxxxx	DFSX	L0X
Type	Type	Package	Packing
68B: Bridge Rectifier	DF__S	DFS	L0X: tape and Reel(embossed tape) for 1500 pc (13'reel)

All products according to RoHS (2015/863/EU)

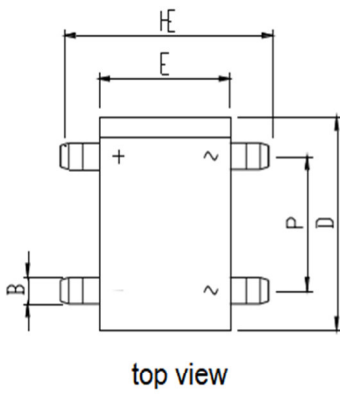
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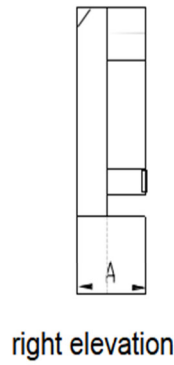
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Bridge Rectifier

DF02S thru DF10S

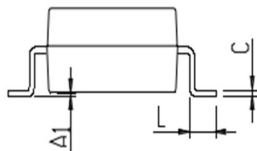
PACKAGE OUTLINE



top view



right elevation



elevation view

Dim	unit:mm		unit:inch	
	Min	Max	Min	Max
A	3.05	3.30	0.120	0.130
A1	0.08	0.33	0.003	0.013
B	1.02	1.20	0.040	0.047
C	0.22	0.33	0.009	0.013
D	8.00	8.51	0.315	0.335
E	6.20	6.50	0.244	0.256
HE	9.80	10.30	0.386	0.406
L	1.02	1.52	0.040	0.060
P	5.00	5.20	0.197	0.205

DFS

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified,

Maximum Ratings (TA = 25 °C unless otherwise noted)							
Parameter	Symbol	DF02S	DF04S	DF06S	DF08S	DF10S	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	40					A
Rating for fusing ($t \leq 8.3ms$)	I^2t	6.7					A ² s
Operating junction and storage temperature range	T_J, T_{STG}	- 55 to + 150					°C
Typical junction capacitance	4.0 V, 1 MHz C_J	10.5					pF

Electrical Characteristics (TA = 25 °C unless otherwise noted)									
Parameter	Test Conditions	Symbol	DF02S	DF04S	DF06S	DF08S	DF10S	Unit	
Maximum instantaneous forward voltage	IF=0.5A	V_F				1.0			Volts
	IF=1.0A					1.1			
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I_R				5			µA
	TA=125°C					50			
Typical thermal resistance ¹⁾	junction to ambient	$R_{\theta JA}$				42			°C/W
	junction to case	$R_{\theta JC}$				12			

Note:1.The thermal resistance from junction to ambient,case or mount,mounted on P.C.B with 13×13mm copper pads,2 OZ,FR4 PCB

Characteristics(Typical)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

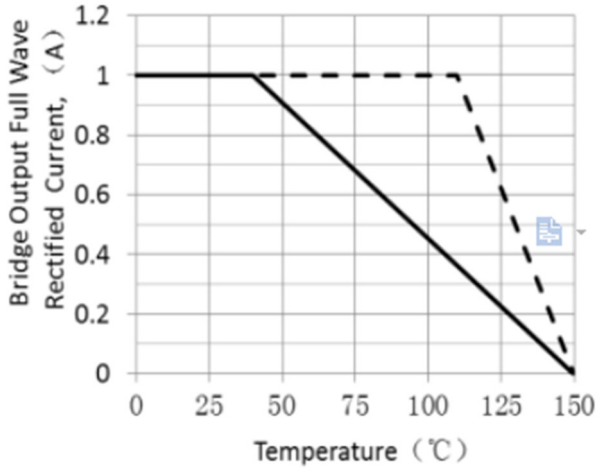


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

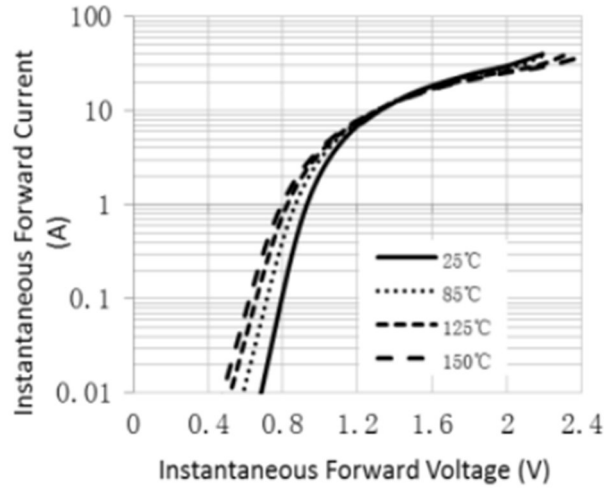


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

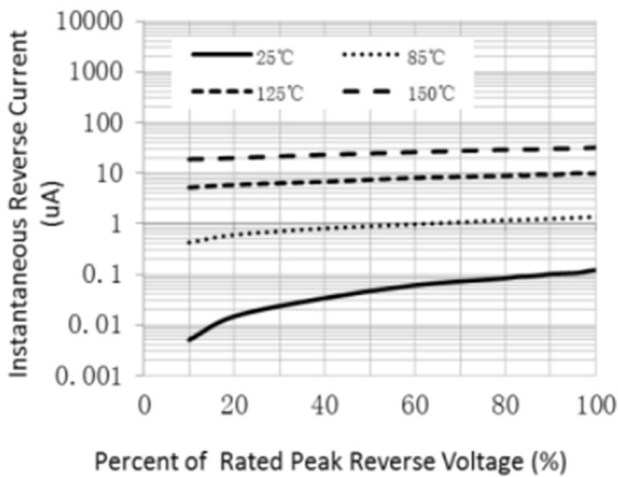
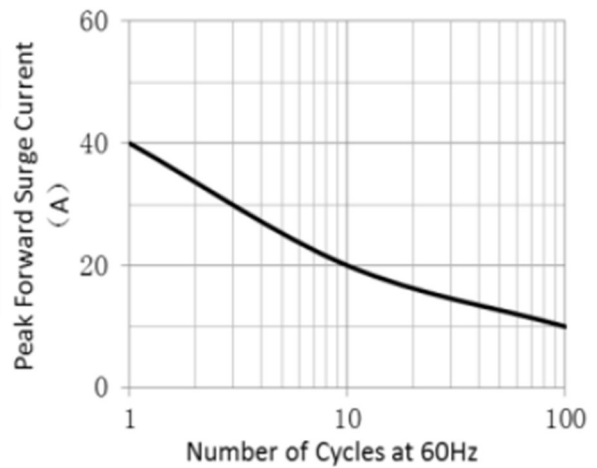
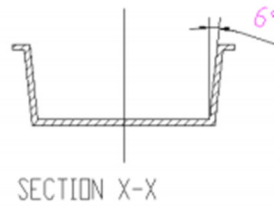
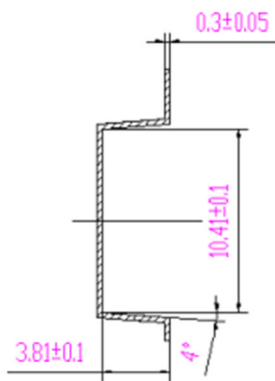
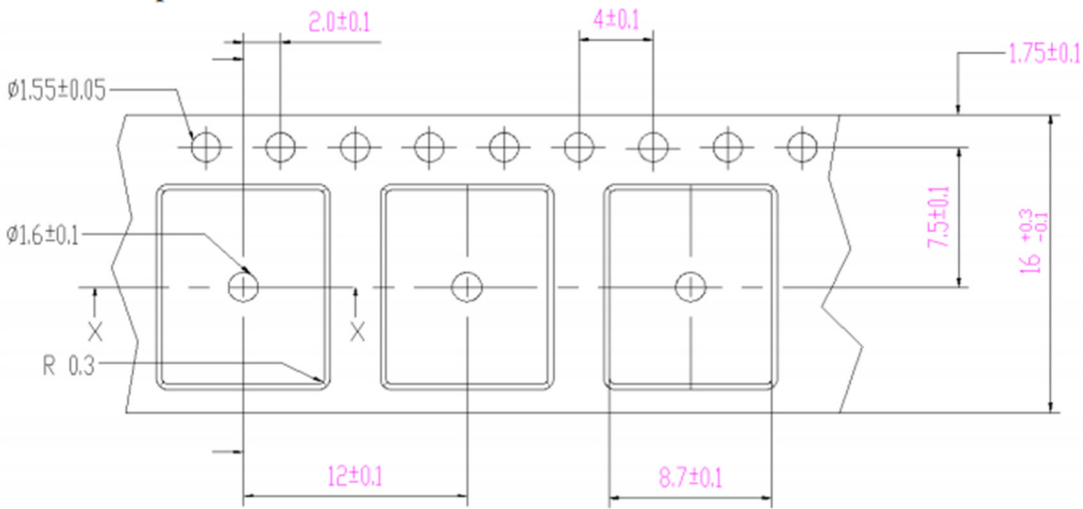


FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

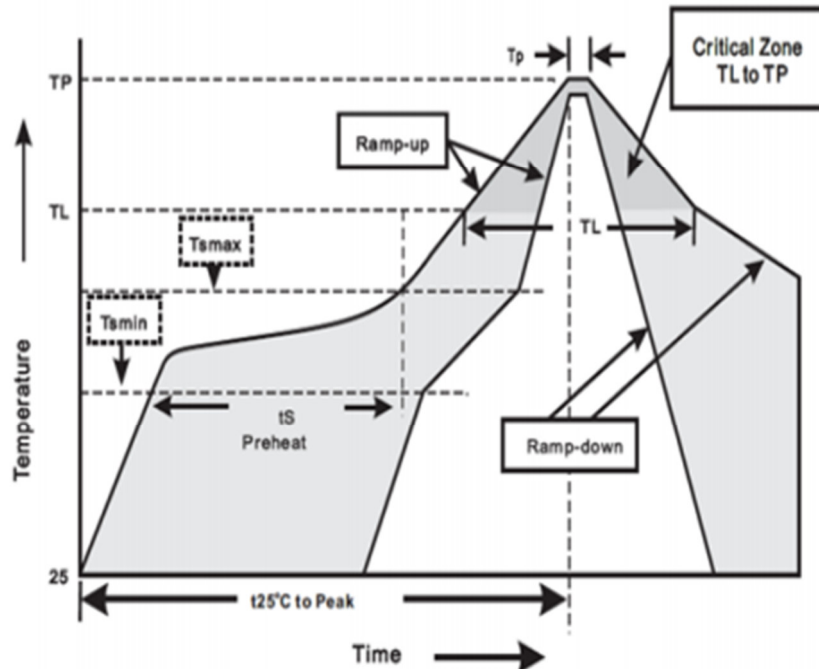


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Carrier Tape Dimensions



Soldering Parameters



Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 20-30°C and a relative humidity 20-60%RH

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