

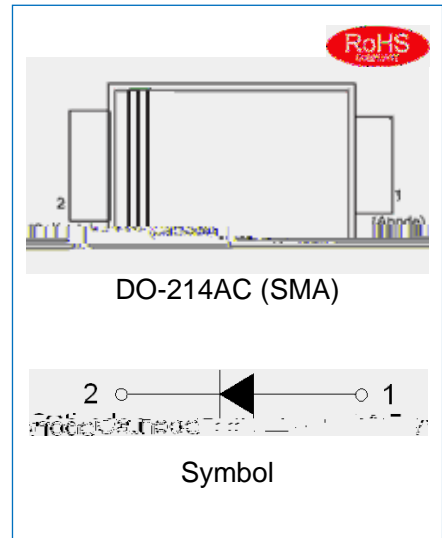


US1N75 ULTRA FAST RECOVERY RECTIFIER

Rev.1.4

DESCRIPTION

- Plastic package has underwriters laboratory flammability classification 94V-0
- For surface mounted applications in order to optimize board space
- Glass passivated chip junction
- Lead free in comply with EU RoHS 2011/65/EU directives
- Ultrafast recovery time for high efficiency



MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per J-STD-002
- Polarity: Color band denotes cathode end
- Weight: 0.0673 gram

ABSOLUTE MAXIMUM RATING (Rating at 25 ambient temperature unless otherwise specified.)

Parameter	Symbol	US1N75	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1200	V
Maximum RMS voltage	V_{RMS}	840	V
Maximum DC blocking voltage	V_{DC}	1200	V
Maximum average forward current at $T_L=90$	$I_{F(AV)}$	1.0	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30	A
Operating junction and storage temperature range	T_j, T_{stg}	-55 to +150	

						Unit
Forward voltage@ $I_F=1A$	$T_j=25$	V_F	-	-	1.9	V
	$T_j=125$		-	1.32	1.65	
	$T_j=150$		-	1.25	1.55	
Maximum DC reverse current at rated DC blocking voltage	$T_j=25$	I_R	-	-	5.0	μA
	$T_j=150$		-	-	200	μA
Typical junction capacitance $V_R=4.0V, f=1MHz$		C_J	-	8	-	pF
Maximum reverse recovery time $I_F=0.5A, I_R=1A, I_{rr}=0.25A$		t_{rr}	-	-	75	ns

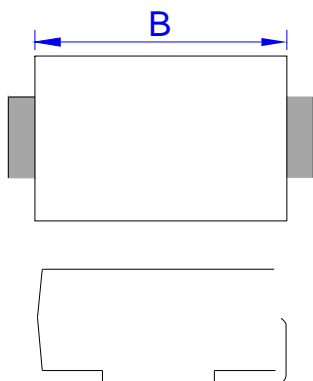
THERMAL RESISTANCES

Symbol	Parameter	US1N75	Unit
$R_{th(j-L)}$	Junction to lead (note1)	30	/W

Note1 Thermal resistance from junction to lead mounted on P.C.B. with 4.0 mm x 4.0 mm copper pad areas.

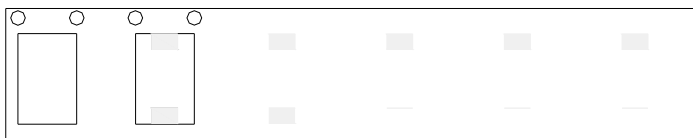
MARKING

PACKAGE MECHANICAL DATA

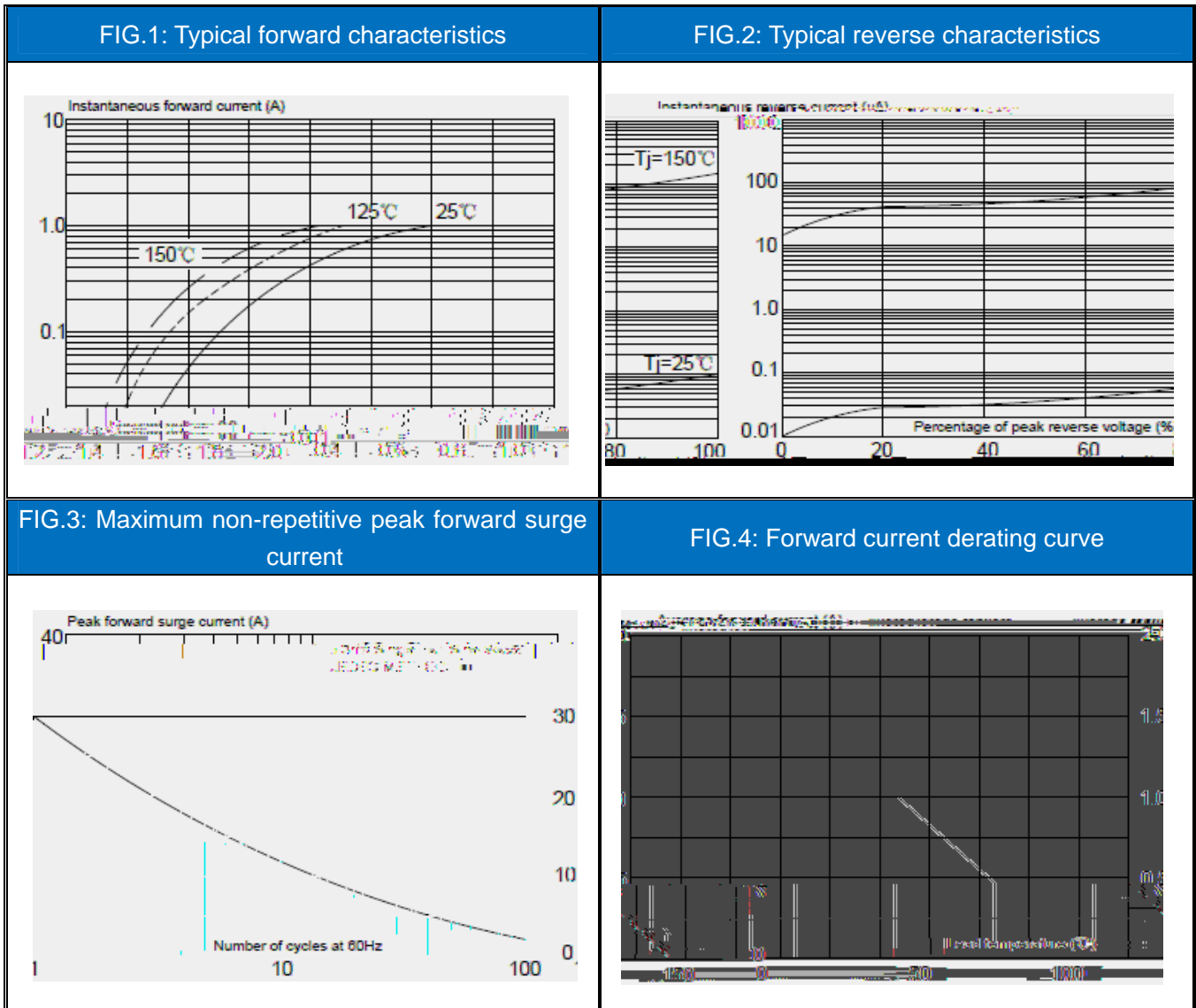


Ref.	Dimensions			
	Millimeters		Inches	
	Min.			
A	2.60			
B	4.15			
C	1.25			
D	0.95			
E	4.90			
F	0.051			
G	0.15			

TAPE AND REEL SPECIFICATION-SMA



CHARACTERISTICS CURVE




Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co.,Ltd assumes no responsibility for the consequences of use without consideration for such information nor use beyond it.

Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information.

This document is the 1.4th version which is made in 28-Apr.-2019. This document supersedes and replaces all information previously supplied.

 is a registered trademark of Jiangsu JieJie Microelectronics Co.,Ltd.

Copyright©2019 Jiangsu JieJie Microelectronics Co.,Ltd. Printed All rights reserved.