



PRELIMINARY

Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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1N7066 thru 1N7068
and
1N7066SMS thru 1N7068SMS

10 AMP
50 – 150 VOLTS
30 ns HYPERFAST RECOVERY
RECTIFIER

Designer's Data Sheet

Part Number/Ordering Information 1/

1N70

Screening 2/

- = Not Screened
TX = TX Level
TXV = TXV
S = S Level

Package Type

- = Axial Leaded
SMS = Surface Mount Square Tab

Voltage/Family

- 66= 50V
67 = 100V
68 = 150V

FEATURES:

- Hyper Fast Reverse Recovery: 30ns Maximum 4/
High Surge Current: 325 A Maximum
Hermetically Sealed
Low Forward Voltage Drop .95 @10A
Void Free Chip Construction
Solid Silver Leads
Available in Axial & Square Tab Versions
TX, TXV, and S-Level Screening Available 2/
Axial Lead Higher Current Replacements for:
1N5807, 1N5809, 1N5811
Possible SMS Replacements for Stud Mount :
1N5812, 1N5814, 1N5816

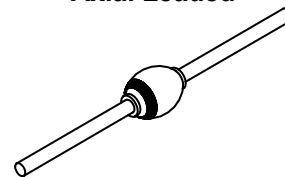
MAXIMUM RATINGS 3/

Table with 4 columns: RATING, SYMBOL, VALUE, UNIT. Rows include Peak Repetitive Reverse Voltage, Average Rectified Forward Current, Peak Surge Current, Operating & Storage Temperature, and Thermal Resistance.

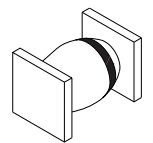
NOTES:

- 1/ For Ordering Information, Price, Operating Curves, and Availability- Contact Factory.
2/ Screening Based on MIL-PRF-19500. Screening Flows Available on Request.
3/ Unless Otherwise Specified, All Electrical Characteristics @25°C.
4/ IF = 1A, IR = 1A, IRR = 0.1A, TA = 25°C
5/ Operating at higher Io currents may be achieved based on specific application and device mounting if Tj is maintained below 175°C.

Axial Leaded



SMS



NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RC0119C

DOC



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 and
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ELECTRICAL CHARACTERISTICS ^{3/}				
CHARACTERISTICS	SYMBOL	VALUE	UNIT	
		MAX		
Instantaneous Forward Voltage Drop	$I_F = 6.0 \text{ A dc}, T_A = +25^\circ\text{C}, 300\mu\text{s pulse}$	V_{F1}	0.900	Vdc
	$I_F = 10 \text{ A dc}, T_A = 25^\circ\text{C}, 300\mu\text{s pulse}$	V_{F2}	0.950	
	$I_F = 20 \text{ A dc}, T_A = 25^\circ\text{C}$	V_{F3}	1.020	
	$I_F = 6 \text{ A dc}, T_A = 125^\circ\text{C}$	V_{F4}	0.85	
	$I_F = 6 \text{ A dc}, T_A = -55^\circ\text{C}$	V_{F5}	1.05	
Reverse Leakage Current	Rated $V_R, T_A = +25^\circ\text{C}, 300\mu\text{s pulse minimum}$	I_{R1}	20	μA
	Rated $V_R, T_A = +100^\circ\text{C}, 300\mu\text{s pulse minimum}$	I_{R2}	1	mA
Junction Capacitance $V_R = 10 \text{ Vdc}, f = 1\text{MHz}, T_A = 25^\circ\text{C}$		C_J	80	pF
Reverse Recovery Time $I_F = 1\text{A}, I_R = 1\text{A}, I_{RR} = 0.1\text{A}, T_A = 25^\circ\text{C}$		t_{rr}	30	ns

Package Outlines:

DIMENSIONS (inches)			DIMENSIONS (inches)		
DIM.	Minimum	Maximum	DIM.	Minimum	Maximum
A	.135	.165	A	.172	.180
B	.135	.155	B	.180	.220
C	.037	.042	C	.020	.028
D	1.000	---	D	.002	---

<p>AXIAL</p>	<p>SMS</p>
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