



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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1N5807US/ 1N5809US/ 1N5811US

Superfast Recovery Diodes

Surface Mount (US)

POWER DISCRETES

Description

Quick reference data

V_R 50 -150 V

I_F 1N5807US to 1N5811US = 6A

t_{rr} 1N5807US to 1N5811US = 30nS

I_R 1N5807US to 1N5811US = 5 μ A

Features

- ◆ Very low reverse recovery time
- ◆ Hermetically sealed non-cavity construction
- ◆ Soft, non-snap, off recovery characteristics
- ◆ Very low forward voltage drop

These products are qualified to MIL-PRF-19500/477 and are preferred parts as listed in MIL-HDBK-5961. They can be supplied fully released as JANTX, JANTXV and JANS versions.

Electrical Specifications

Electrical specifications @ $T_A = 25^\circ\text{C}$ unless otherwise specified.

	Symbol	1N5807US	1N5809US	1N5811US	Units
Working Reverse Voltage	V_{RWM}	50	100	150	V
Repetitive Reverse Voltage	V_{RRM}	50	100	150	V
Average Forward Current (@ 75°C lead length = 0.375')	$I_{F(AV)}$	6.0			A
Repetitive Surge Current (@ 55°C in free air lead length = 0.375')	I_{FRM}	25			A
Non-Repetitive Surge Current ($t_p = 8.3\text{mS}$ @ V_r & T_{JMAX})	I_{FSM}	125			A
Storage Temperature Range	T_{STG}	-65 to +175			°C
Average Forward Current Max (pcb mounted: $T_A = 55^\circ\text{C}$) Sine wave Square wave ($d = 0.5$)	$I_{F(AV)}$ $I_{F(AV)}$	1.7 1.8			A
I^2t for fusing ($t = 8.3\text{mS}$) max	I^2t	32			A ² S
Forward Voltage Drop max @ $T_J = 25^\circ\text{C}$	V_F	0.875 @ 4A			V
Reverse Current max @ V_{WRM} , $T_J = 25^\circ\text{C}$ @ V_{WRM} , $T_J = 100^\circ\text{C}$	I_R I_R	5.0 150			μ A
Reverse Recovery Time max (1.0A I_F to 1.0A I_{RM} recover to 0.25A $I_{RM(REC)}$)	t_{rr}	30			nS
Junction Capacitance typ @ $V_R = 5\text{V}$ $f = 1\text{MHz}$	C_J	60			pF
Thermal Resistance to end cap	$R_{\theta JEC}$	6.5			°C/W

POWER DISCRETES

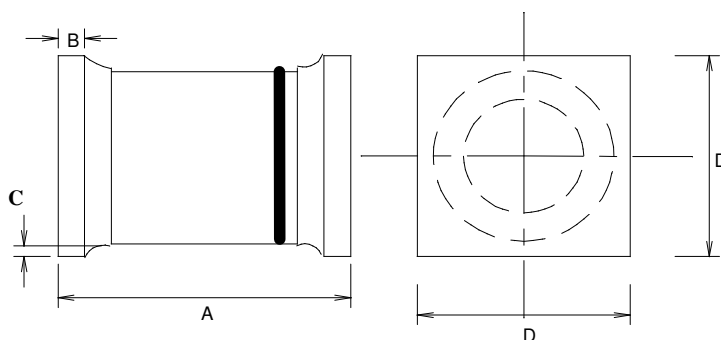
Ordering Information

Part Number	Description
1N5807US, 1N5809US, 1N5811US	Surface Mount ⁽¹⁾

Note:

(1) Available in trays and tape and reel packaging. Please consult factory for quantities.

Outline Drawing



* Cathode is denoted by a black band on a white body.

	Dimensions in Inches	
	1N5807US - 1N5811US	
	MIN	MAX
A	0.2	0.225
B	0.019	0.028
C	0.003	-
D	0.137	0.148

Contact Information

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