1N5802US/1N5804US/1N5806US Superfast Recovery Diodes Surface Mount (US)

POWER DISCRETES

Description

Quick reference data

V_R 50 -150 V

 $I_{\rm F}$ 1N5802US to 1N5806US = 2.5A

 t_{rr} 1N5802US to 1N5806US = 25nS

 $I_{\rm b}$ 1N5802US to 1N5806US = 1 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 and JANTXV versions.

Electrical Specifications

Electrical specifications @ T_{Δ} = 25 °C unless otherwise specified.

	Symbol	1N5802US	1N5804US	1N5806US	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)}	2.5		А	
Repetitive Surge Current (@ 55°C lead length = 0.375')	l _{FRM}	14		А	
Non-Repetitive Surge Current (tp = 8.3mS @ Vr & T _{JMAX})	I _{FSM}	35		А	
Storage Temperature Range	T _{STG}	-65 to +175		°C	
Average Forward Current Max (pcb mounted: $T_A = 55^{\circ}C$) Sine wave Square wave (d = 0.5)	l _{F(AV)} l _{F(AV)}	1.0 1.1		A	
Pt for fusing (t = 8.3mS) max	Pt Pt	10		A ² S	
Forward Voltage Drop max @ T _J = 25°C	$V_{_{\rm F}}$		0.875 @ 1A		V
Reverse Current max @ V _{WRM} , T _J = 25°C @ V _{WRM} , T _J = 100°C	_ _R _ _R	1.0 50		μА	
Reverse Recovery Time max (1.0A I_F to 1.0A I_{RM} recover to 0.25A $I_{RM(REC)}$)	trr		25		nS
Junction Capacitance typ @ V _R = 5V f = 1MHz	C_{J}	25		pF	
Thermal Resistance to end cap	$R_{_{\theta JEC}}$		13		°C/W



POWER DISCRETES

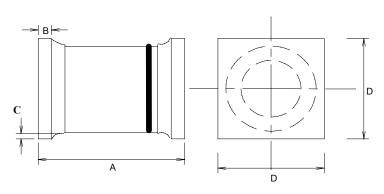
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Part Number	Description
1N5802US, 1N5804US, 1N5806US	Surface Mount ⁽¹⁾

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 1N5802US - 1N5806US		
	MIN	MAX	
А	0.168	0.2	
В	0.019	0.028	
С	0.003	-	
D	0.091	0.103	

Contact Information

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