ULTRA FAST RECOVERY SILICON RECTIFIER DIE

FEATURES / BENEFITS:

- ✓ Die fabricated on a MIL-PRF-19500 JANKC qualified manufacturing line
- ✓ Class H and class K element evaluation per MIL-PRF-19500/477
- ✓ All ratings are @ T_A = 25 °C unless otherwise specified

ELECTRICAL CHARACTERISTICS:

Maximum Ratings:

Characteristics	Symbol	Condition	Min.	Max.	Units
Peak Inverse Voltage DC Blocking Voltage 1N5802 1N5804 1N5806	V_{RWM}	-		 50 100 150	V
Breakdown Voltage 1N5802 1N5804 1N5806	V_{BR1}	I_{BR}=100µA	 60 110 160		V
Max. Average Forward Current	$I_{F(AV)}$	T_A= 55°C		1.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	T_p= 8.3 ms		35	A
Max. Junction Temperature	T_J	-	-65	+175	°C
Max. Storage Temperature	T_{stg}	-	-65	+175	°C

Electrical Characteristics:

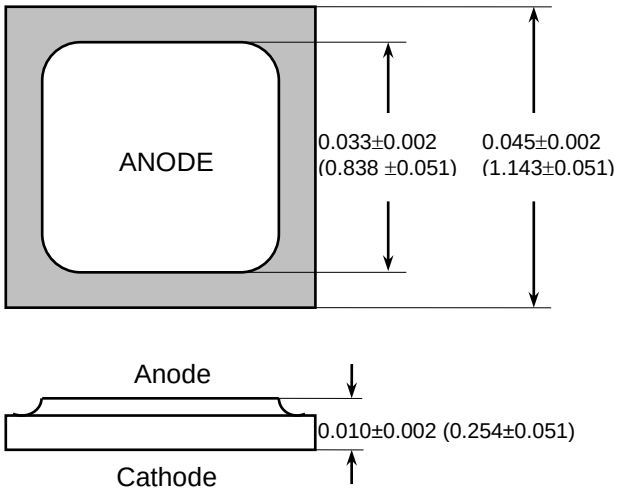
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	1A, pulse, T_J = 25 °C	0.875	V
	V_{F2}	2.5A, pulse, T_J = 25 °C	0.975	V
	V_{F3}	1A, pulse, T_J = 125 °C	0.800	V
	V_{F4}	1A, pulse, T_J = -65 °C	1.075	V
Max. Reverse Current	I_{R1}	V_R = V_{RWM}, pulse, T_J = 25 °C	1.0	µA
	I_{R2}	V_R = V_{RWM}, pulse, T_J = 125 °C	175	µA
Breakdown Voltage 1N5802 1N5804 1N5806	V_{BR2}	I_{BR}=100µA, T_J = -65 °C	 50 100 150	V
Reverse Recovery Time	t_{rr}	I_F = I_R = 0.5A , I_{RM} = 0.05A	25	ns
Max. Junction Capacitance	C_T	V_R = 10V, T_C = 25 °C f_{SIG} = 1MHz, V_{SIG} = 50mV (p-p)	25	pF

JANHCF1N5802, JANHCF1N5804, JANHCF1N5806
JANKCF1N5802, JANKCF1N5804, JANKCF1N5806
JANHCH1N5802, JANHCH1N5804, JANHCH1N5806
JANKCH1N5802, JANKCH1N5804, JANKCH1N5806

ULTRAFAST RECOVERY SILICON RECTIFIER DIE

TECHNICAL DATA
DATA SHEET 5498, REV A

PACKAGE DIMENSIONS (inches/mm):



JANHCF/ JANKCF Series

Top anode and bottom cathode

Top Metal Ti (0.3 kA) / Al (45 kA) nominal
Bottom Metal Ti (1.2 kA) / Ni (1.8 kA) / Au (4.0 kA) nominal

JANHCH/ JANKCH Series

Top anode and bottom cathode

Top Metal Ti (0.3 kA) / Al (45 kA) nominal
Bottom Metal Ti (1.2 kA) / Ni (1.8 kA) / Ag (3.0 kA) nominal

PART ORDERING INFORMATION:

JANxCX1NXXXX

- x: Quality Level
- X: Manufacturer ID
- XXXX: Part Number

Suffix	Part Number	Description
H	JANHCF1N5806	Class H Level
K	JANKCF1N5806	Class K Level

SENSITRON
SEMICONDUCTOR

JANHCF1N5802, JANHCF1N5804, JANHCF1N5806
JANKCF1N5802, JANKCF1N5804, JANKCF1N5806
JANHCH1N5802, JANHCH1N5804, JANHCH1N5806
JANKCH1N5802, JANKCH1N5804, JANKCH1N5806

ULTRAFAST RECOVERY SILICON RECTIFIER DIE

TECHNICAL DATA
DATA SHEET 5498, REV A