

**SURFACE MOUNT
FAST SWITCHING DIODE**

REVERSE VOLTAGE - 100 V
POWER DISSIPATION - 400 mW

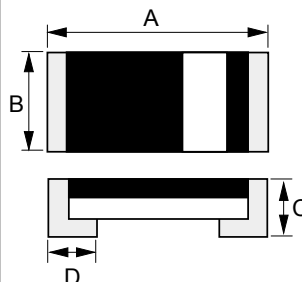
FEATURES

- For surface mounted application
- Silicon epitaxial planar diode
- High speed switching
- Ultra small surface mount package
- Low leakage current

MECHANICAL DATA

- Case : 1206
- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Terminals: Lead Free Plating
- Polarity : Color band denotes cathode
- Weight : Approx. 11.067mg

1206



1206		
Dim.	Min.	Max.
A	3.00	3.40
B	1.30	1.70
C	0.75	0.95
D	0.35	0.75
All Dimensions in millimeter		

Maximum Ratings and Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Units
Reverse Voltage	V _{RRM}	75	V
Non-Repetitive Peak Reverse Voltage	V _{RSM}	100	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _{AV}	150	mA
Forward Surge Current at Tp = 1.0 s Tp = 1.0 us	I _{FSM}	800 2.0	mA A
Total Power Dissipation	P _d	400	mW
Typical Thermal Resistance Junction to Ambient Junction to Case	R _{θJA} R _{θJC}	375 120	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Parameters	Symbol	Test Condition	Min.	Max.	Unit
Reverse Breakdown Voltage	V _{BR}	IR = 1uA	100		V
Forward Voltage	V _F	IF = 10mA		1.0	V
Reverse Leakage Current	I _R	VR = 20V VR = 75V VR = 20V, T _J = 150°C VR = 75V, T _J = 150°C		25 5.0 50 60	nA uA uA uA
Junction Capacitance	C _J	VR = 0V ; F = 1MHz		4	pF
Reverse Recovery Time	T _{rr}	IF = IR=10mA ; RL = 100Ω measured at IR=1mA		4	ns

REV. 9, Sep-2012, KSYS01

Fig.1 - FORWARD CURRENT DERATING CURVE

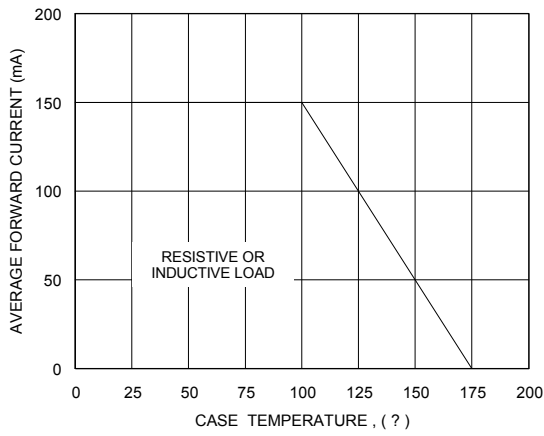


Fig.4 - TYPICAL REVERSE CHARACTERISTICS

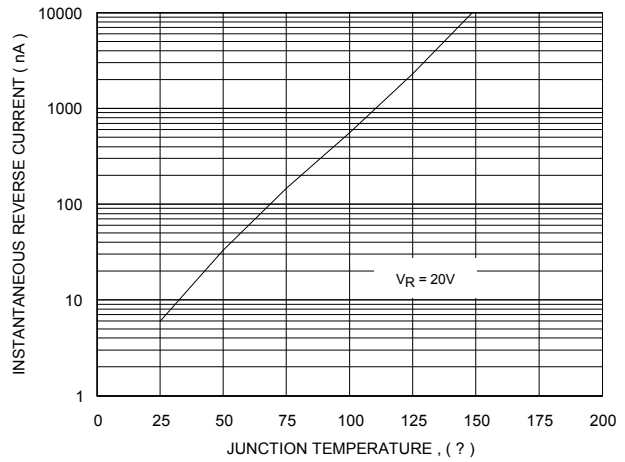


Fig.2 - POWER DISSIPATION DERATING CURVE

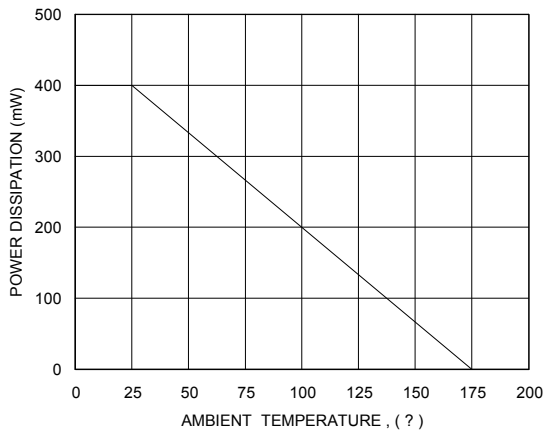


Fig.5-TYPICAL JUNCTION CAPACITANCE

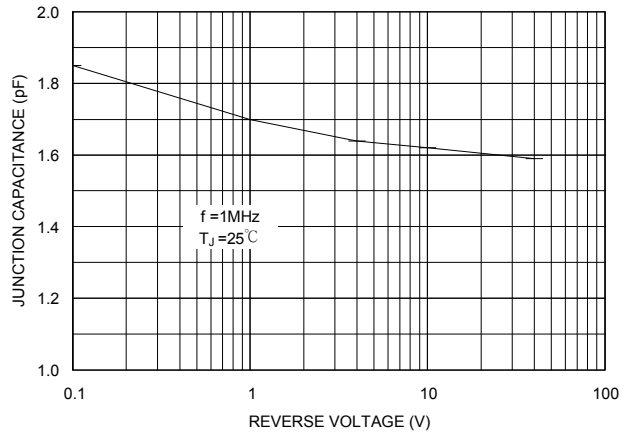
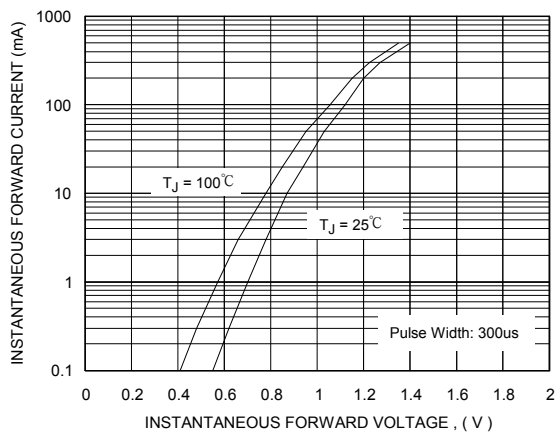
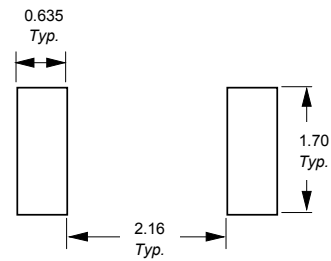


Fig.3-TYPICAL FORWARD CHARACTERISTICS

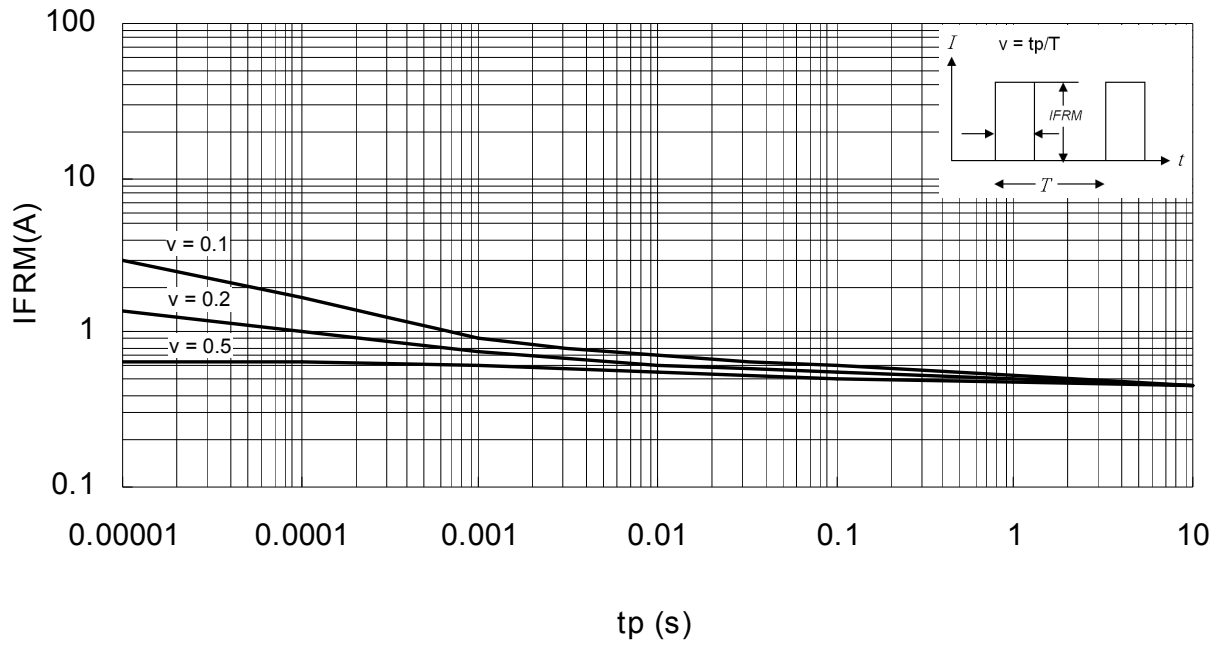


Recommended Mounting Pad Layout



All dimensions in millimeter

Fig.7 - Admissible Repetitive Peak Forward Current vs. Pulse Duration



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