

Small Signal Product

Features

- ◇ Designed for mounting on small surface
- ◇ Extremely thin/leadless package
- ◇ High mounting capability, strong surge with stand, high reliability
- ◇ Pb free version and RoHS compliant
- ◇ Halogen free

Mechanical Data

- ◇ Case : 1206 standard package, molded plastic
- ◇ Terminal : Gold plated, solderable per MIL-STD-750, method 2026 guaranteed
- ◇ High temperature soldering guaranteed : 260°C/10s
- ◇ Polarity : Indicated by cathode band
- ◇ Weight : 0.010 g (approximately)

1206



Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Maximum Ratings

Parameter	Symbol	Value	Units
Power Dissipation	P_D	500	mW
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Repetitive Peak Forward Current	I_{FRM}	300	mA
Mean Forward Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current Tp = 1sec square waveform Tp = 8.3ms single half sine waveform	I_{FSM}	0.5 2.0	A
Thermal Resistance form Junction Ambient (Note 1)	$R_{\theta JA}$	375	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	- 65 to + 175	°C

Electrical Characteristics

Parameter	Symbol	Min	Max	Units
Reverse Breakdown Voltage (Note 2)	$V_{(BR)}$	-	75	V
Forward Voltage $I_F=100mA$	V_F	-	1	V
Reverse Leakage Current $V_R=20V$ $V_R=75V$	I_R	-	25	nA
		-	5	μA
Junction Capacitance $V_R=0, f=1.0MHz$	C_J		4.0	pF
Reverse Recovery Time (Note 3)	T_{rr}		4	ns

Note: 1 Valid provided that electrodes are kept at ambient temperature

Note: 2 Test Condition : $I_R=100\mu A$

Note: 3 Test Condition : $I_F=10mA, I_R=1mA, R_L=100\Omega$

RATINGS AND CHARACTERISTICS CURVES

Fig. 1 Typical Forward Characteristics

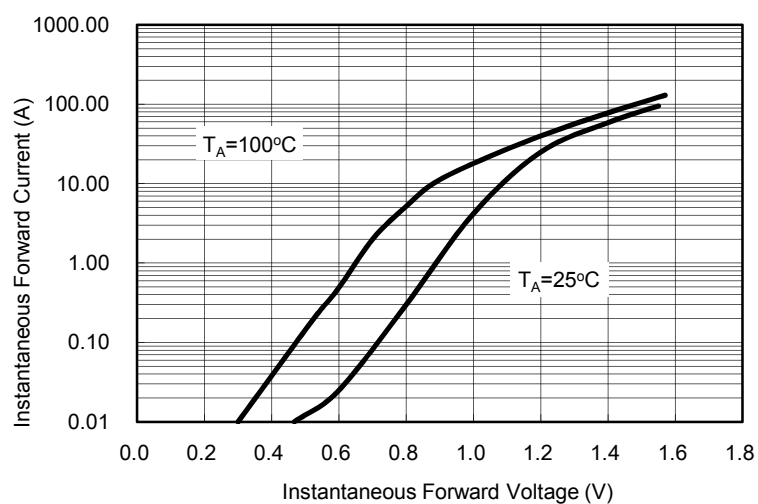


Fig. 2 Reverse Current VS. Reverse Voltage

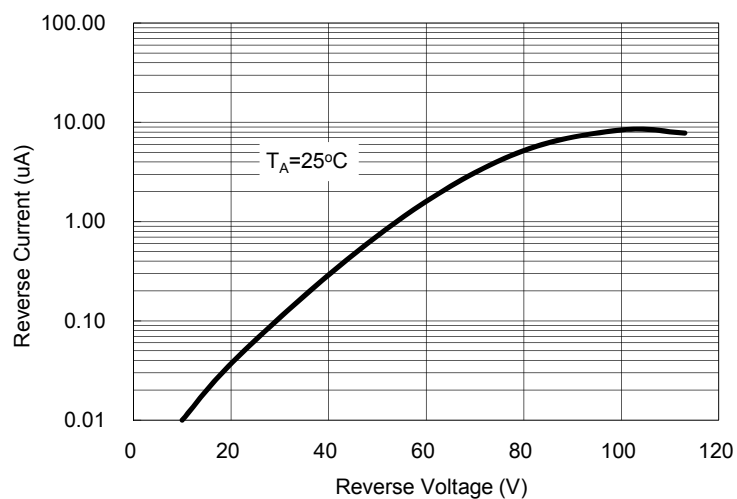


Fig. 3 Admissible Power Dissipation Curve

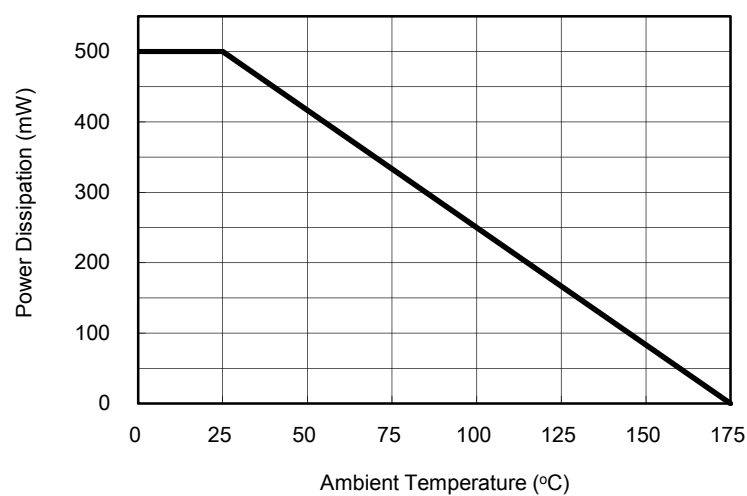


Fig. 4 Typical Junction Capacitance

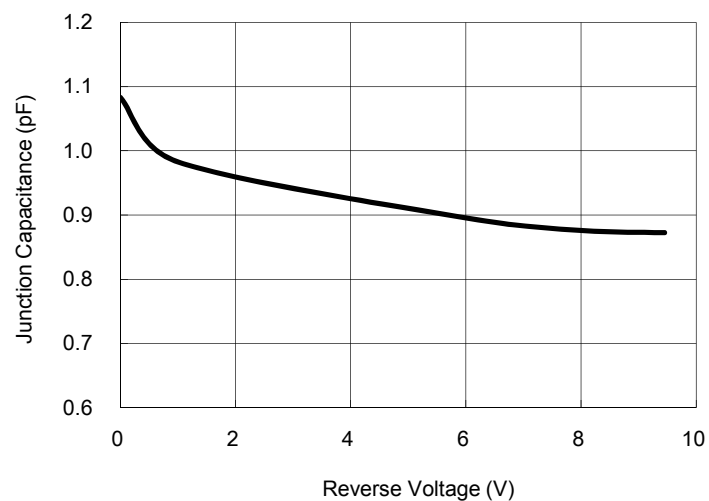
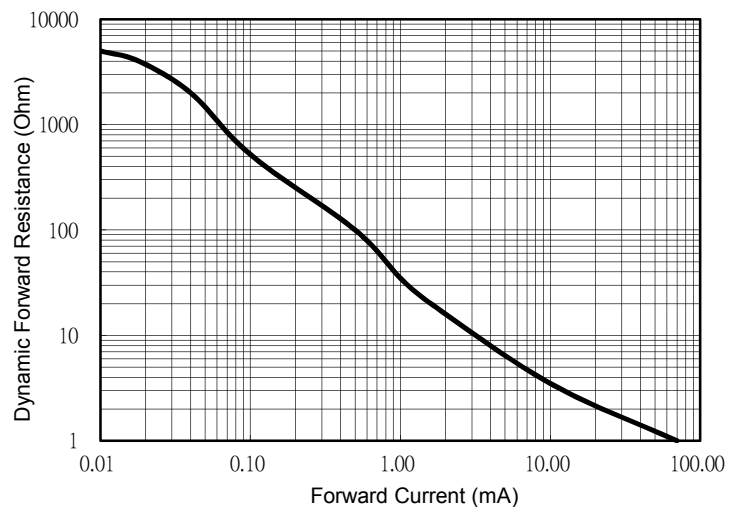


Fig. 5 Forward Resistance VS. Forward Current

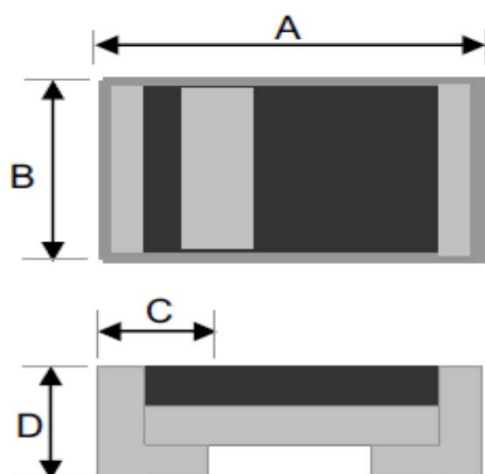


Ordering information (Detail, example)

Part No.	Package	Packing	Packing code (Green)	Manufacture code
TS4148	1206	5K / 7" Reel	RXG	(Note)
TS4148	1206	10K / 13" Reel	RAG	
TS4148	1206	5K / 7" Reel	RXG	
TS4148	1206	5K / 7" Reel	RXG	C0

Note : Manufacture special control, if empty means no special control requirement.

Dimensions



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	3.00	3.40	0.118	0.134
B	1.30	1.70	0.051	0.067
C	0.35	0.75	0.014	0.030
D	0.75	0.95	0.030	0.037