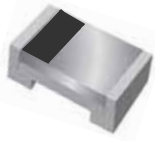


Small Signal Diode

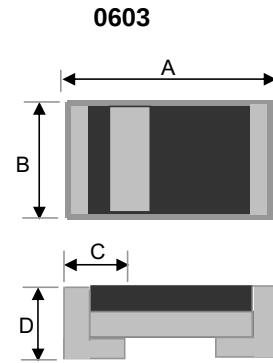


Features

- ✧ 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 :0603 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 : 0.004gram (approximately)



Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.45	1.65	0.057	0.065
B	0.70	0.90	0.028	0.035
C	0.25	0.45	0.010	0.018
D	0.55	0.75	0.022	0.030

Ordering Information

Part No.	Package	Packing
TS4148C RZG	0603	5K / 7" Reel

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P_D	200	mW
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Repetitive Peak Forward Current	I_{FRM}	200	mA
Mean Forward Current	I_o	100	mA
Non-Repetitive Peak Forward Surge Current at $t < 1s$ and $T_j = 25^\circ C$ at $t \leq 8.3ms$ and $T_j = 25^\circ C$	I_{FSM}	0.4 0.1	A
Thermal Resistance (Junction to Ambient)	$R_{\theta JA}$	375	$^\circ C/W$
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage $I_R = 100\mu A$	$V_{(BR)}$	-	75	V
Forward Voltage $I_F = 10mA$ $I_F = 100mA$	V_F	-	1.00	V
		-	1.25	V
Reverse Leakage Current $V_R = 20V$ $V_R = 75V$	I_R	-	0.025	μA
		-	5.0	
Junction Capacitance $V_R = 0V, f = 1.0MHz$	C_J	-	4	pF
Reverse Recovery Time $I_F = I_R = 10mA, R_L = 100\Omega$	T_{rr}	-	4.0	ns

Small Signal Diode

Rating and Sharacteristic Curves

FIG 1 Typical Forward Characteristics

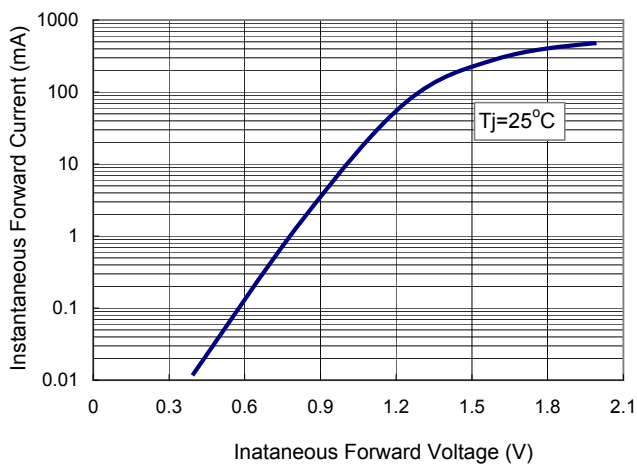


FIG 2 Typical Reverse Characteristics

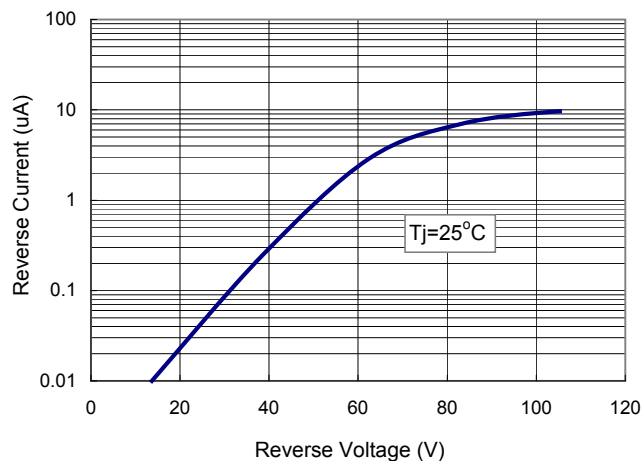


FIG 3 Admissible Power Dissipation Curve

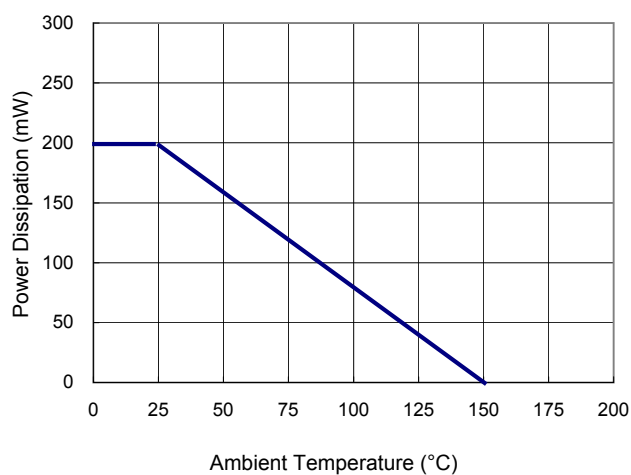


FIG 4 Typical Junction Capacitance

