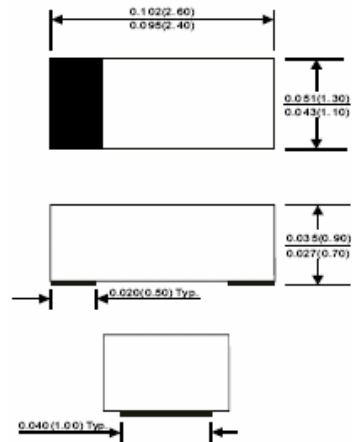


TS4148 RW

350MW Surface Mount Switching Diode

1005


Dimensions in inches and (millimeters)

Features

- ✧ Designed for mounting on small surface
- ✧ Extremely thin / leadless package
- ✧ High mounting capability, strong surge withstand high reliability.
- ✧ Use in sensitive electronics protection against voltage transient induced by inductive load switching and lighting on lcs, MOSFET, signal lines of sensor units for consumer, computer, industrial, automotive and telecommunication.

Mechanical Data

- ✧ Cases: 1005 standard package molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Terminal: Gold plated, lead free, solderable per MIL-STD-750, Method 2026 guaranteed
- ✧ Polarity: Color band denotes cathode.
- ✧ Mounting position : Any
- ✧ Weight: 0.006 gram(Approx.)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	Min.	Typ.	Max.	Units
Repetitive Peak Reverse Voltage	V_{RRM}			100	V
Reverse Voltage	V_R			75	V
Average Forward Rectified Current	$I_{(AV)}$			150	mA
Repetitive Peak Forward Current	I_{FRM}			300	mA
Peak Forward Surge Current Tp = 1uS Tp = 1mS	I_{FSM}		4 1		A
Power Dissipation	P_D			350	mW
Forward Voltage $I_F = 50 \text{ mA DC}$	V_F			1.0	V
Reverse Leakage Current VR = 20V VR=75V	I_R			25 2.5	nA uA
Junction Capacitance between terminal F=1MHz and 0VDC Reverse Bias	C_T			4	pF
Reverse Recovery Time $I_F = I_R = 10\text{mA}$, $R_L = 100\text{ohms}$, $I_{RR} = 1\text{mA}$				4	nS
Junction Temperature	T_J			125	°C
Storage Temperature	T_{STG}	40		125	°C

RATINGS AND CHARACTERISTIC CURVES (TS4148 RW)

FIG.1 Forward Current Derated Curve

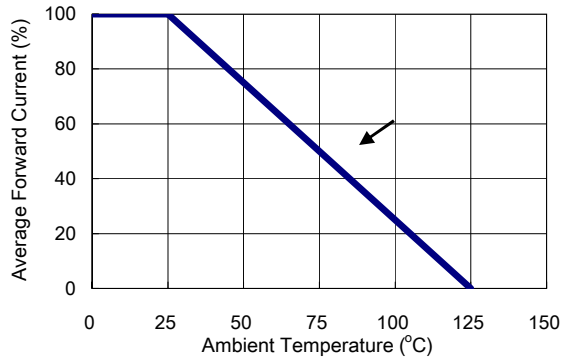


FIG 2 Maximum Forward Surge Current

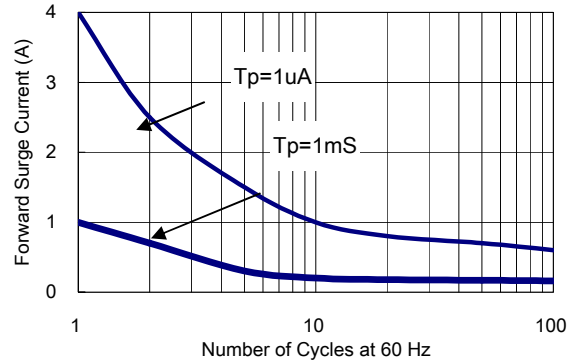


FIG 3 Maximum Forward Characteristics

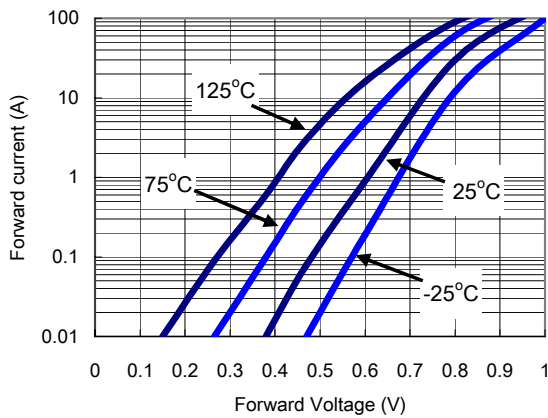


FIG 4 Maximum Reverse characteristic

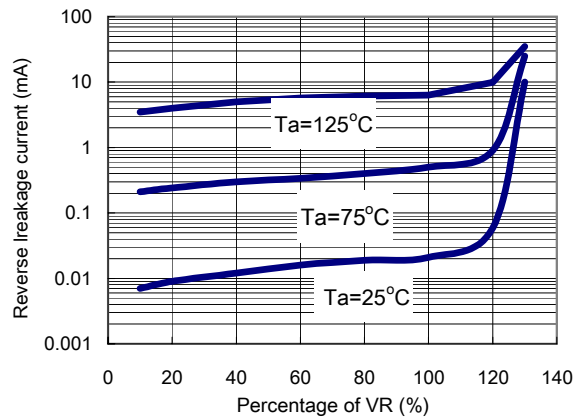


FIG 5 Typical Junction Capacitance

