



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**CD4148W
CD4148WS
CD4148WT**

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SWITCHING DIODE

VOLTAGE - 75~100 Volts

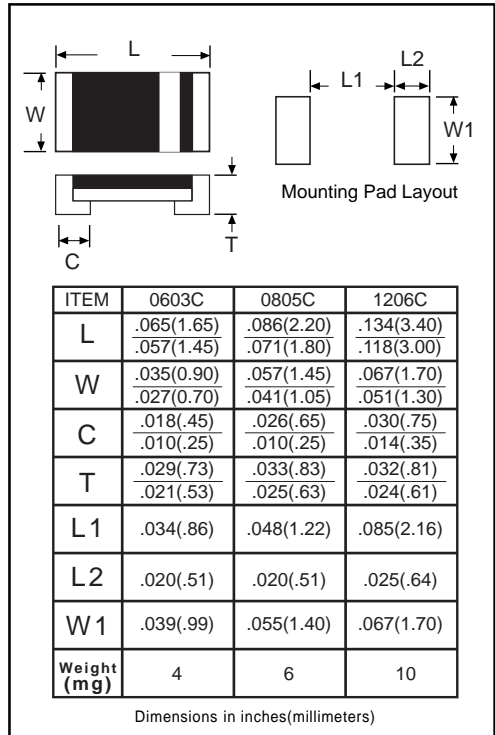
CURRENT - 0.3 Ampere

FEATURES

- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage drop
- * High speed switching
- * High current capability
- * High reliability

MECHANICAL DATA

- * Case: 1206 / 0805 / 0603
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

	SYMBOL	CD4148WT (0603C)	CD4148WS (0805C)	CD4148W (1206C)	UNITS
Maximum Reverse Voltage	VR	80	100	100	V
Maximum Non-Reprtitive Peak Reverse Voltage	VRM	90	100	100	V
Maximum Average Rectified Current	IF	100	150	150	mA
Repetitive Peak Forward Current	IFRM	225	300	300	mA
Peak Forward Surge Current @T<1s	IFSM	400	500	500	mA
Maximum Power Dissipation @TA=25°C	Ptot	200	200	400	mW
Maximum Forward Voltage at IF=10 mA	VF	1.0	1.0	1.0	V
Maximum Reverse Current	VR=20V	0.025	0.025	0.025	µA
	VR=80V	0.1	0.5	0.5	µA
Maximum Reverse Recovery Time(Note 1)	trr	4	4	4	ns
Typical Junction Capacitance(Note 2)	CJ	3	4	4	pF
Typical Thermal Resistance	RθJA	375			K/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150			°C

Note: 1. Test conditions: IF=IR=10mA, RL=100Ω, measured at IR=1mA
2. Measured at 1MHz and VR=0

RATING AND CHARACTERISTIC CURVES (CD4148W THRU CD4148WT)

FIG. 1 - FORWARD CHARACTERISTICS

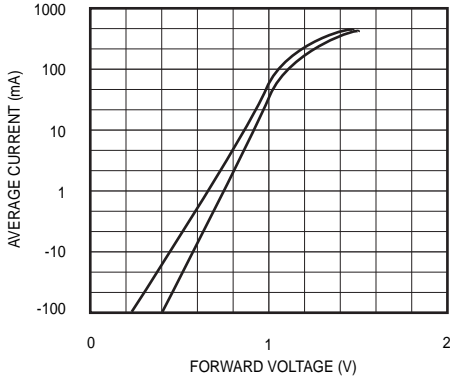


FIG. 2 - ADMISSIBLE POWER DISSIPATION vs. AMBIENT TEMPERATURE

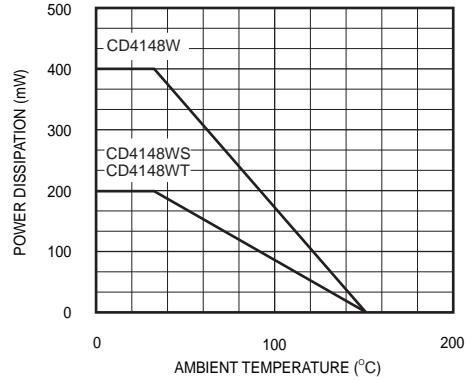


FIG. 3 - FORWARD CURRENT DE-RATING

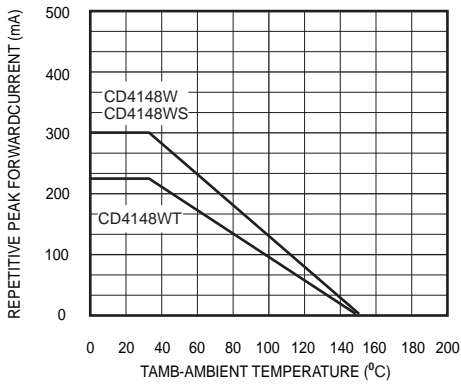
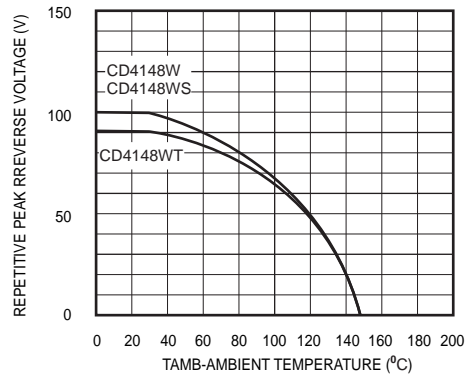


FIG. 4 - REVERSE VOLTAGE DE-RATING



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