CDBAV99 (SOT-23)
70V 0.2A

Small Signal Switching Chip Diode, Dual

Feature

Silicon Epitaxial Planar Diode.
Fast switching dual chip diode with anode to cathode.
This diode is also available in other comfigurations figuration including single with type designation CDMMBD4148, a dual common anode with type desigantion CDBAV70, and a dual common cathode with type desigantion CDBAW56
Lead (Pd) - free component.

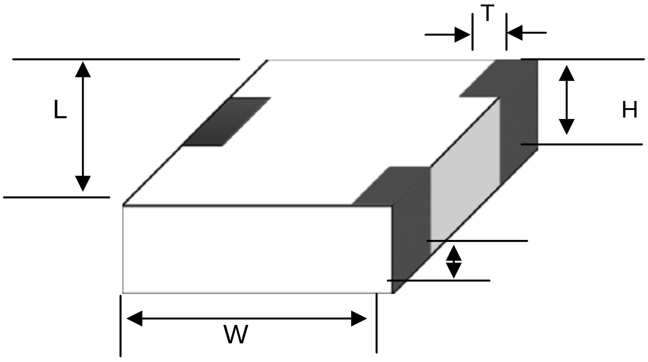
Cathode Band Color: white

Case: SOT23 Plastic Case
Weight: approx. 21mg

Value: CDBAW99

Mounting Pad Layout

DIMENSION:			
(mm)	CDBAV56	CDBAV70	CDBAV99
L	3.1 ± 0.2	3.1 ± 0.2	3.1 ± 0.2
W	2.6 ± 0.2	2.6 ± 0.2	2.6 ± 0.2
H	0.95 ± 0.2	0.95 ± 0.2	0.95 ± 0.2
T	0.75 ± 0.2	0.75 ± 0.2	0.75 ± 0.2
C	0.8 ± 0.1	0.8 ± 0.1	0.8 ± 0.1



Maximum Ratings & Electrical Characteristics T_{amb} = 25 ℃, unless otherwise noted

Parameter	Symbol	Value	Unit
Device marking code		**CDBAV99**	
Non repetitive peak reverse voltage	V_{RM}	100	V
Reprtitive pead reverse voltage	$V_R = V_{RRM}$	70	V
Forward continuous current	I_F	200	mA
Non repetitive peak forward current tp = 1 us tp = 1 ms tp = 1 s	I_{FSM}	2.0 1.0 0.5	A
Average forward current	I_{FSM}	$150^{1)}$	mA
Power dissipation	P_{TOT}	$300^{1)}$	mW
Forward voltage IF = 1mA IF = 10mA IF = 50mA IF = 150mA	V_F	715 855 1000 1250	mV
Leakage current VR = 70V VR = 70V, T_j=150℃ VR = 25V, T_j=150℃	I_R	2.5 50 30	µA
Thermal resistance junction to ambient air	R_{thJA}	$430^{1)}$	K/W
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	- 55 to + 150	℃
Diode capacitance ($V_F = V_R = 0$, f =1MH$_Z$)	C_{tot}	2	pF
Reverse Recovery time (I_F =10mA to I_R = 1mA, V_R = 6V, R_L = 100Ω)	T_{rr}	6	ns

[1] Valid provided that eletrodrs are kept at ambient temperature.

RoHS Compliant
品質承諾標誌
Quality Commitment

Small Signal Switching Chip Diode, Dual

Value:CDBAV99

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Typical Characteristics

(Tamb=25℃, unless otherwise specified)

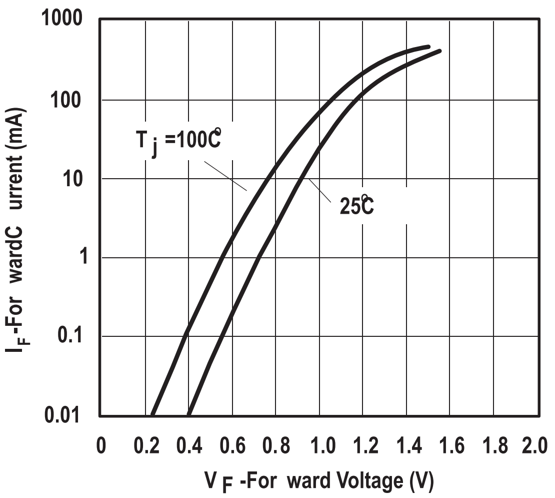


Figure1. Forward Current vs. Forward Voltage

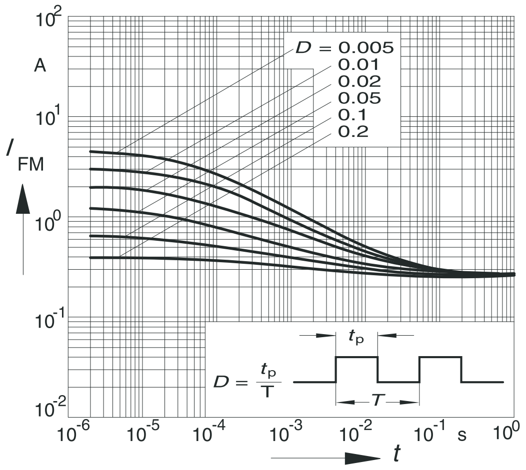
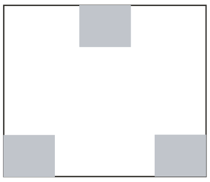


Figure2. Peak forward current $I_{FM} = f(t_p)$

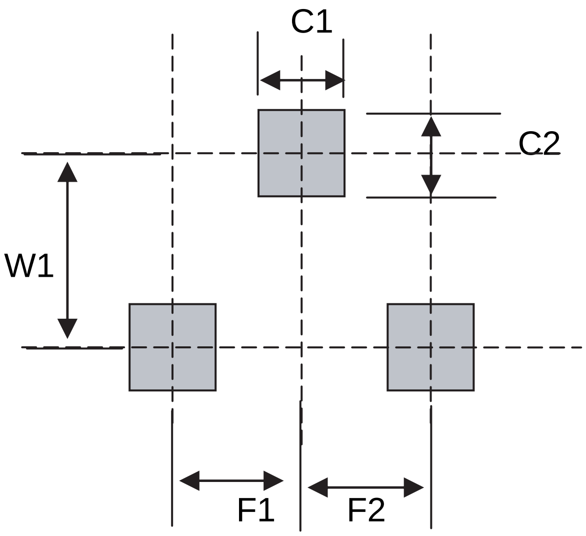
Device outlook

Front side

Back Side



Mounting Pad Layout



Mounting Pad Layout			
Typ.(mm)	CDBAW56	CDBAV70	CDBAV99
W1	2.0	2.0	2.0
C1	0.9	0.9	0.9
C2	0.9	0.9	0.9
F1	1.14	1.14	1.14
F2	1.14	1.14	1.14

品質承諾標誌
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Suggested thermal profiles for soldering processes

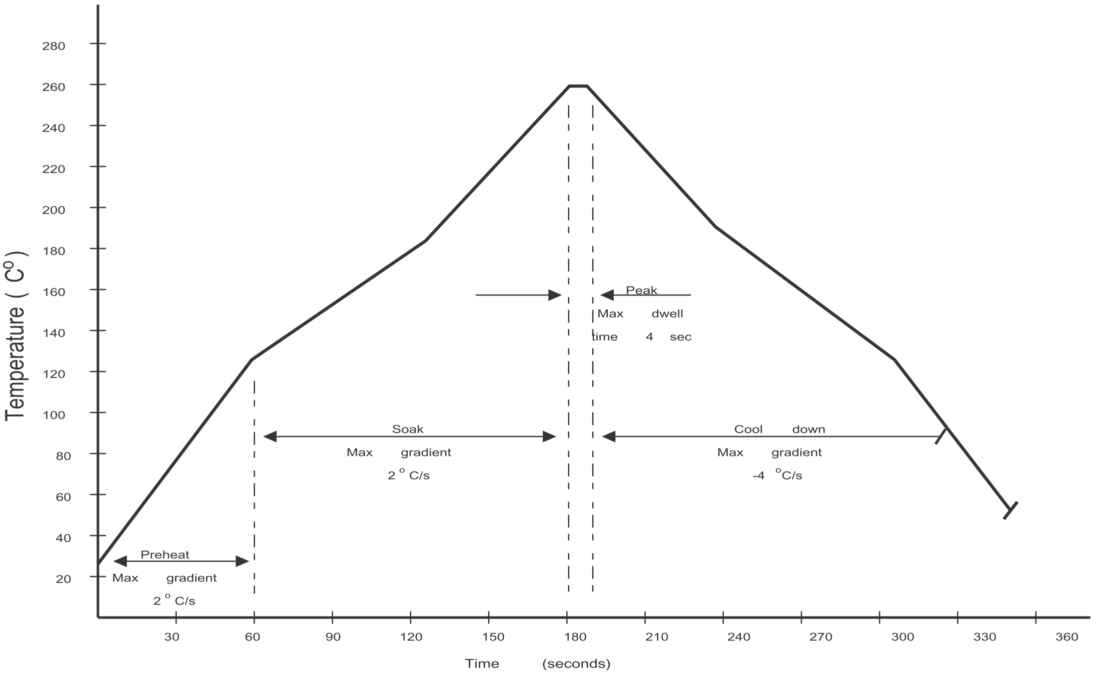

Fig.1 Typical Wave Soldering Thermal Profile

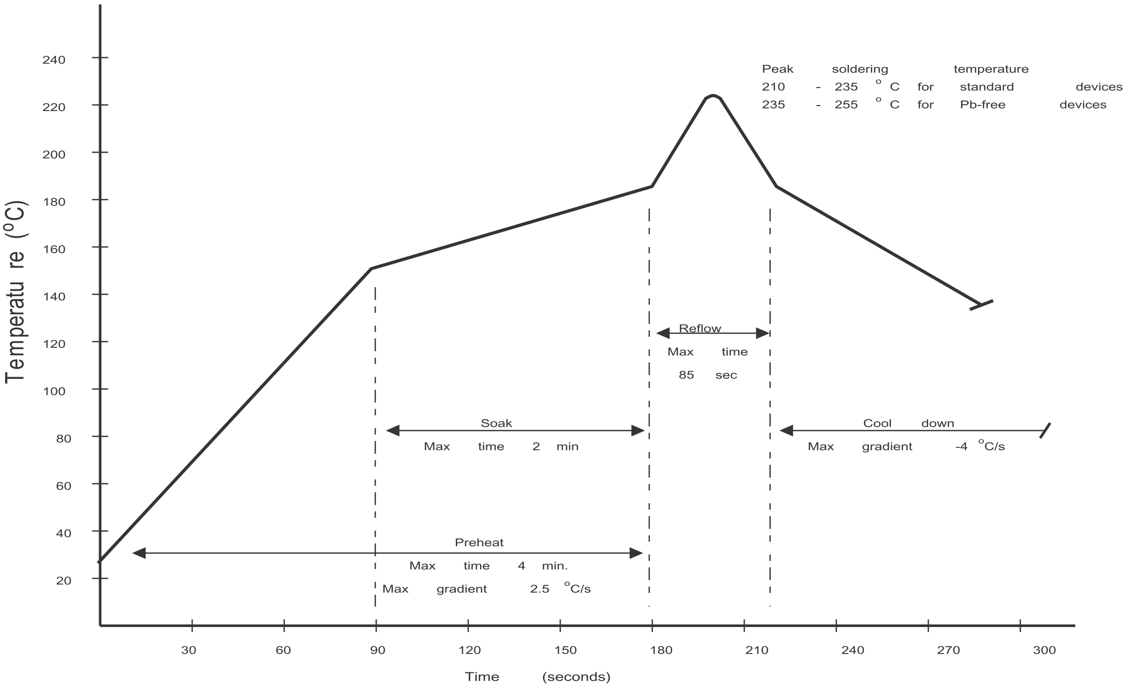

Fig.2 Typical IR Reflow Soldering Thermal Profile