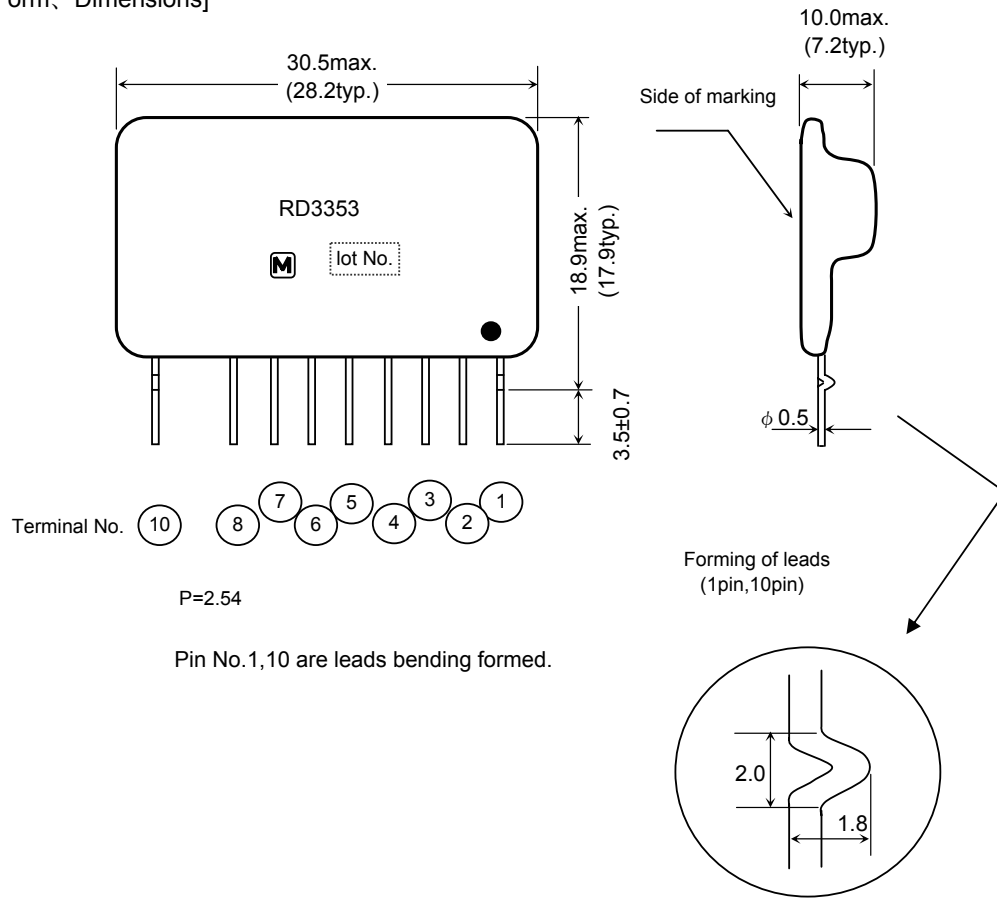


Part Name DC-DC Converter

Part No. EHDRD3353

3 - 1

[External Form、Dimensions]



Unit ; mm

Item	Contents
Materials of leadpins	$\phi 0.5$ Fe Lead with Cu,Sn and Sn-Bi Plating
Color	Black
Material of resin	Phenol denatured epoxy resin (Flame class: UL94V-0)
External appearance	Without noticeable flaw and stain
Marking	Silver White and clear
Notes	Bottom Edge of Substrate must be molded
	Dimensions which have no tolerance show the typical values.
	Terminal No.9 are removed.

Panasonic Electronic Devices Co.,Ltd.

## [Absolute Maximum Ratings]

No.	Item	Symbol	Rating	Unit	Remarks
1	Power Supply	Vin	170	VDC	
2	Operational Temperature	Topr	-25 to +85	degC	Refer to derating curve. Avoid dew condensation (note3)
3	Storage Temperature	Tstg	-25 to +105	degC	

## [Electric Characteristics]

Ambient Temperature : 25 degC

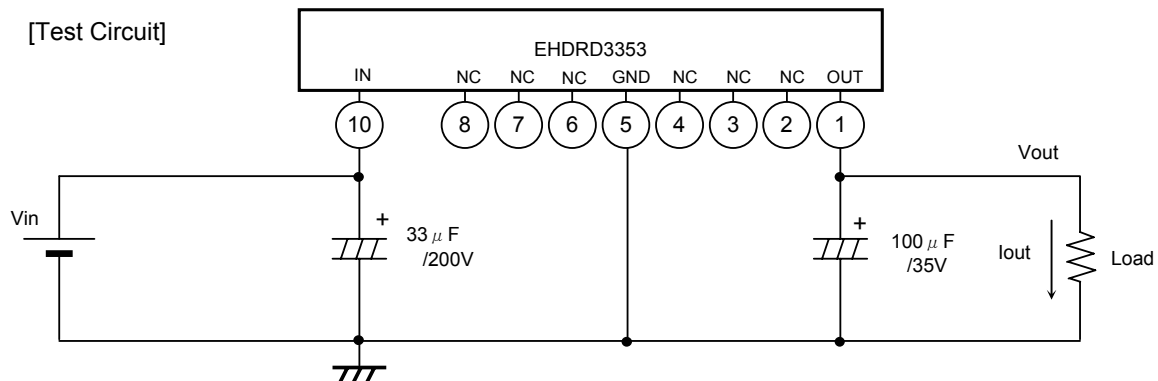
No.	Item	Symbol	Specification			Unit	Condition/notes
			Min.	Typ.	Max.		
1	Input voltage range	Vin	113	141	170	VDC	
2	Output voltage	Vout	18.50	20.00	21.50	VDC	Vin=141VDC Iout=50mA
3	Output current	Iout	—	—	100	mA	Vin=113 to 170VDC (note1)
4	Line regulation	Vr	—	0.05	0.15	VDC	Vin=113 to 170VDC Iout=50mA
5	Load regulation	Vl	—	0.05	0.20	VDC	Vin=141VDC Iout=0 to 50mA
6	Output ripple voltage	Vp	—	0.05	0.15	Vp-p	Vin=141VDC Iout=50mA (note2)
7	Efficiency	$\eta$	60	75	—	%	Vin=141VDC Iout=100mA

note1 : Please refer to the derating curve for maximum output current.

note2 : The output ripple doesn't include the spike noise.

note3 : Avoid dew condensation always.

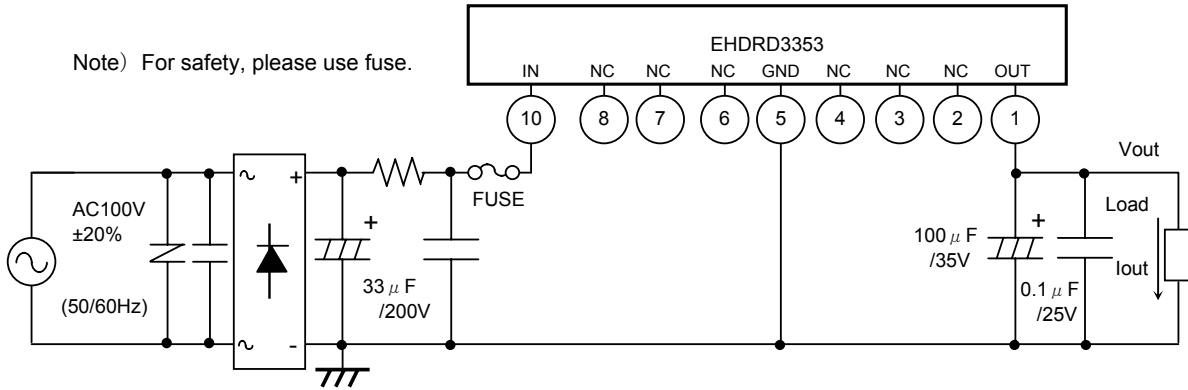
## [Test Circuit]



We recommend Low impedance Aluminium capacitor for power supply.

[Application]

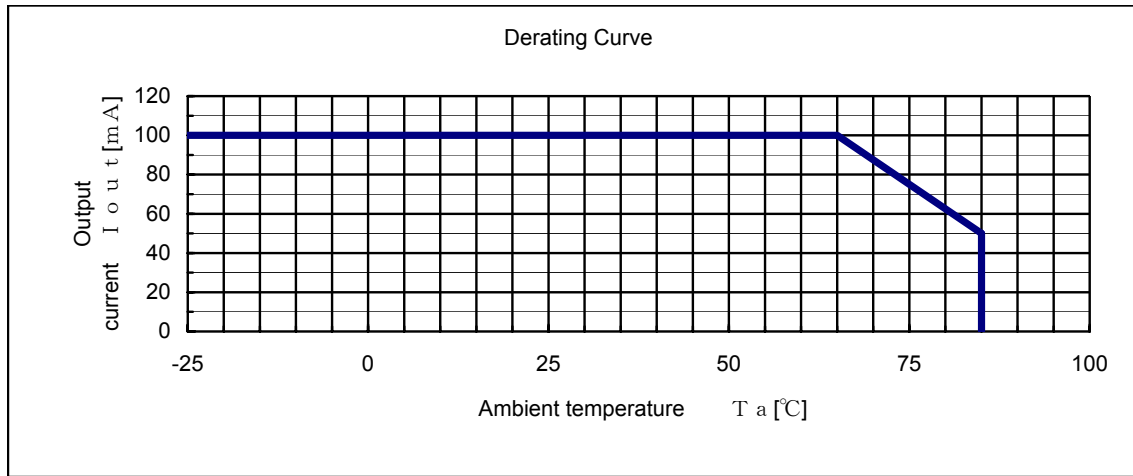
Note) For safety, please use fuse.



We recommend Low impedance Aluminium capacitor for power supply.

[Derating Curve]

Vin=113V to 170VDC



[Circuit Diagram]

