

SANYO Semiconductors DATA SHEET

An ON Semiconductor Company

RD2006RH-SB-

Diffused Junction Silicon Diode

Ultrahigh-Speed Switching Diode

Features

- · VRRM=600V
- · V_F=1.75V max. (I_F=20A)
- $t_{rr}=21ns$ (typ.)

Specifications

Absolute Maximum Ratings at Ta=25°C

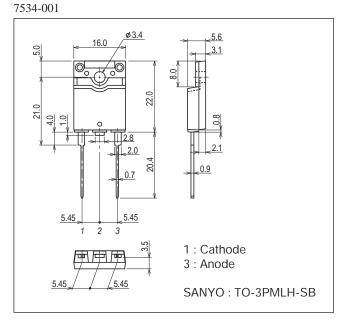
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM	DC bias	600	V
Average Output Current	I _O	50Hz resistive load, Sine wave Tc=63°C	20	Α
R.M.S Forward Current	I _F (RMS)	Tc=25°C (SANYO's ideal heat dissipation condition) *, Package limited, DC	30	Α
Surge Forward Current	I _{FSM}	50Hz Sine wave, 1 pulse	220	Α
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

^{*.} SANYO's condition is radiation from backside

The method is applying silicone grease to the backside of the device and attaching the device to water-cooled radiator made of aluminium

Package Dimensions

unit: mm (typ)



Product & Package Information

• Package : TO-3PMLH

• JEITA, JEDEC : SC-93, TO-247, SOT-199

• Minimum Packing Quantity : 100 pcs./tray

Marking

RD2006

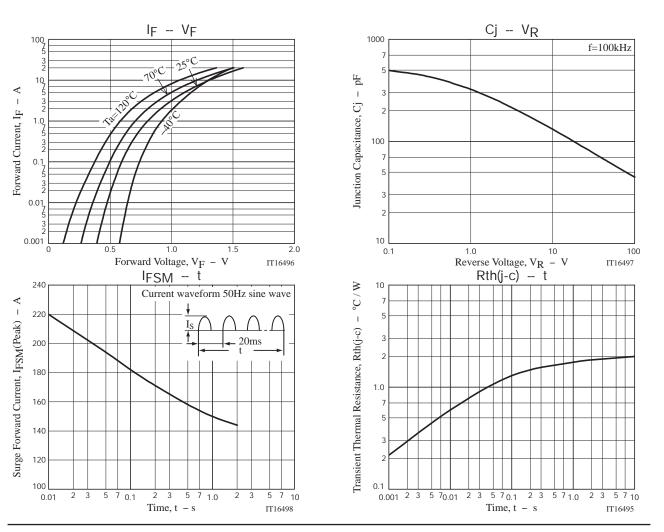
Electrical Connection



RD2006RH-SB

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Reverse Voltage	VR	I _R =1mA	600			V
Forward Voltage	VF	I _F =20A		1.6	1.75	V
Reverse Current	IR	V _R =600V			100	μΑ
Reverse Recovery Time	t _{rr} 1	I _F =10A, di / dt=100A/μs			50	ns
	t _{rr} 2	IF=0.5A, IR=1A		21		ns
Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC	·		2	°C/W



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