

Silicon Diffused Junction Type Damper Diode for Ultrahigh-Definition Display Applications

## Features

- · High breakdown voltage ( $V_{RRM}$ :1600V).
- · High reliability.
- One-point fixing type plastic molded package facilitating easy mounting and heat dissipation.
- · Fast forward/reverse recovery time.

# **Package Dimensions**

unit:mm



DD54SC

# **Specifications**

### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit			
Repetitive Peak Reverse Voltage	VRRM		1600	V			
Non-repetitive Peak Reverse Voltage	VRSM		1600	V			
Average Output Current	IO		5	А			
Peak Output Current	lop	PW≤100µs, duty≤50%	20	А			
Surge Forward Current	IFSM	Sine wave, 10ms	50	А			
Junction Temperature	Tj		150	°C			
Storage Temperature	Tstg		-55 to +150	°C			

#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	VR	I <sub>R</sub> =1mA	1600			V
Forward Voltage	٧ <sub>F</sub>	I <sub>F=5A</sub>			1.8	V
Reverse Current	۱ <sub>R</sub>	V <sub>R</sub> =1000V			200	μA
Reverse Recovery Time	trr	Ip=100mA, Ip=100mA			1.5	μs
Forward Recovery Time	tfr	I <sub>F=100mA</sub>		0.1	0.2	μs
Junction Capacitance	Cj	V <sub>R</sub> =10V, f=100kHz		40		pF
Thermal Resistance	Rthj-c	Juntion-Case			3.75	°C/W

SANYO Electric Co., Ltd. Semiconductor Bussiness Headquarters TOKYO OFFICE, Tokyo Bldg., 1-10, Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN



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