

# SANYO Semiconductors DATA SHEET

SBT700-06RH — Schottky Barrier Diode (Twin Type • Cathode Common) 60V, 70A Rectifier

# **Applications**

• High frequency rectification (switching regulators, converters, choppers).

# **Features**

- Guaranteed up to  $Tj=150^{\circ}C$ .
- Low forward voltage (VF max=0.66V).
- Fast reverse recovery time.
- · Low switching noise.
- High reliability due to highly reliable planar structure.

# **Specifications**

## Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		60	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		66	V
Average Output Current	10	50Hz resistive load, Sine wave Tc=44°C	70	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	200	А
Junction Temperature	Тј		150	°C
Storage Temperature	Tstg		-55 to +150	°C

### Electrical Characteristics at Ta=25°C

Symbol	Conditions	Ratings			Unit
Symbol		min	typ	max	Onit
VR	I <sub>R</sub> =10mA, Tj=25°C *	60			V
VF	IF=30A, Tj=25°C *			0.66	V
IR	V <sub>R</sub> =30V, Tj=25°C *			1	mA
	VF	VR IR=10mA, Tj=25°C *   VF IF=30A, Tj=25°C *	VR IR=10mA, Tj=25°C * 60   VF IF=30A, Tj=25°C * 60	Symbol Conditions min typ   V <sub>R</sub> I <sub>R</sub> =10mA, Tj=25°C * 60 60   V <sub>F</sub> I <sub>F</sub> =30A, Tj=25°C * 60 60	Symbol Conditions min typ max   VR IR=10mA, Tj=25°C * 60

Note) \* : Value per element

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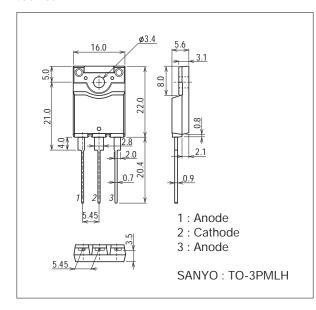
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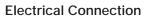
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Interterminal Capacitance	С	V <sub>R</sub> =10V, Tj=25°C *		1400		рF
Thermal Resistance	Rth(j-c)	Junction-Case : Smoothed DC			1.5	°C/W

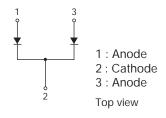
Note) \* : Value per element

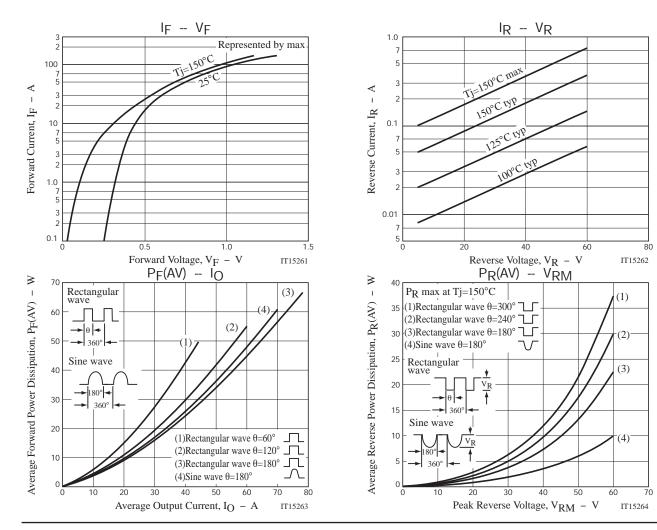
#### **Package Dimensions**

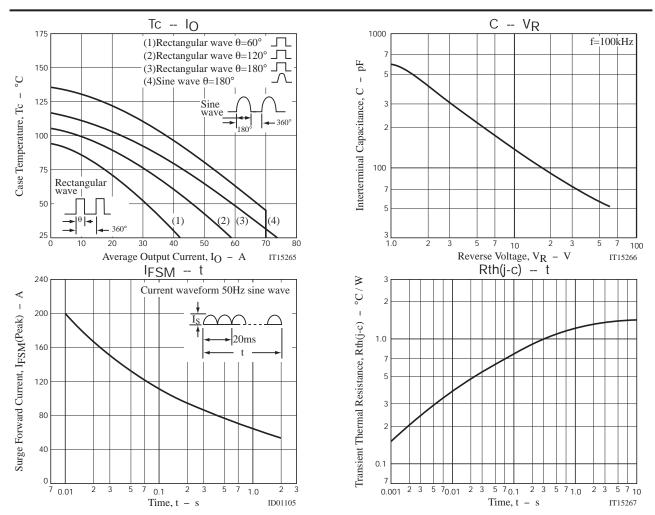
unit : mm (typ) 7504-002











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