



# SBT700-06RH

## Schottky Barrier Diode

60V, 70A,  $V_F$ ; 0.66V Dual To-3PF-3L Cathode Common

ON Semiconductor®

<http://onsemi.com>

### Applications

- High frequency rectification (switching regulators, converters, choppers)

### Features

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

### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

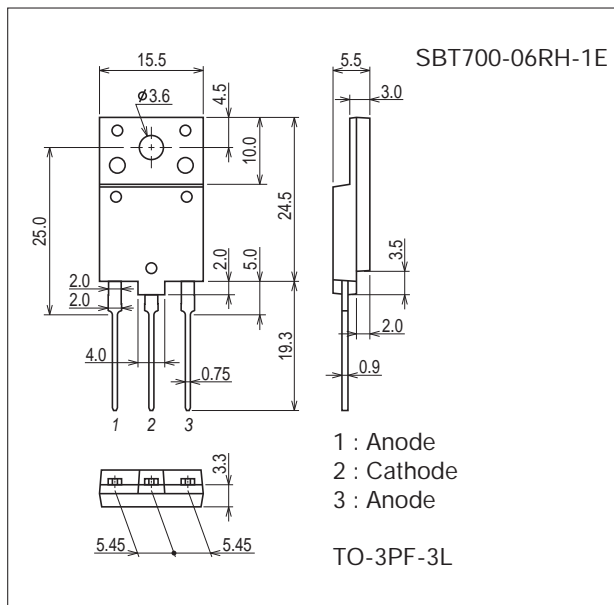
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		60	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		66	V
Average Output Current	$I_O$	50Hz resistive load, Sine wave $T_c=44^\circ\text{C}$	70	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	200	A
Junction Temperature	$T_j$		150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

### Package Dimensions

unit : mm (typ)

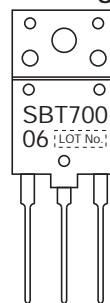
7538A-003



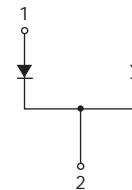
### Ordering & Package Information

Device	Package	Shipping	memo
SBT700-06RH-1E	TO-3PF-3L SC-94	30pcs./tube	Pb-Free

### Marking



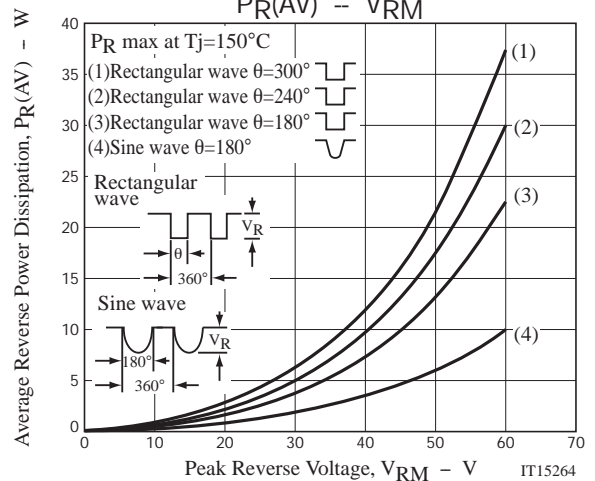
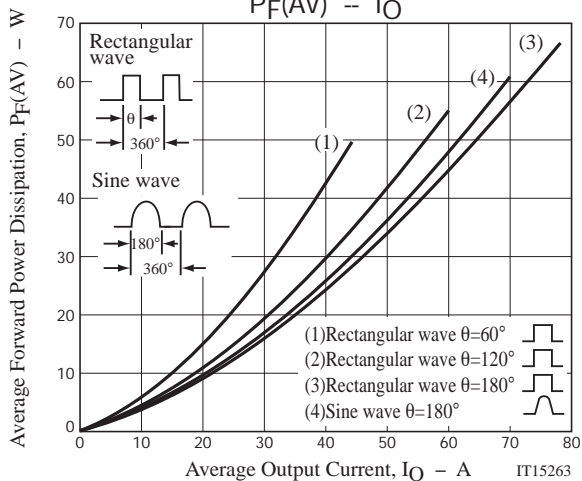
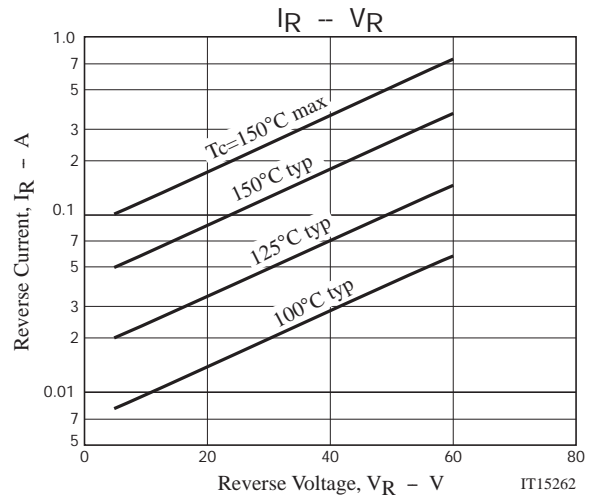
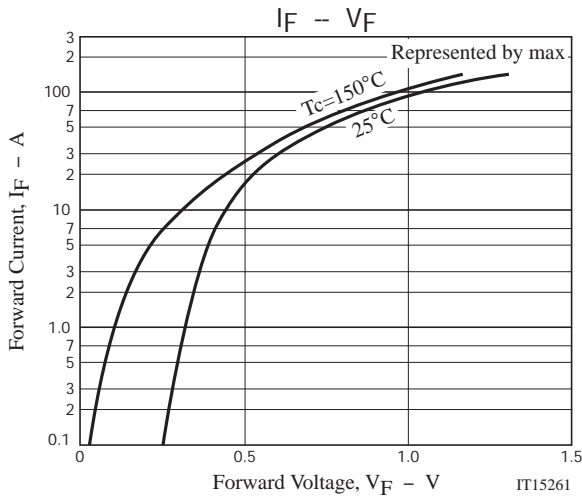
### Electrical Connection

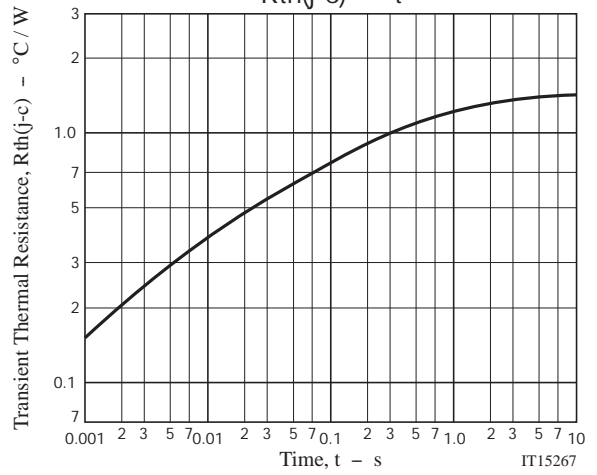
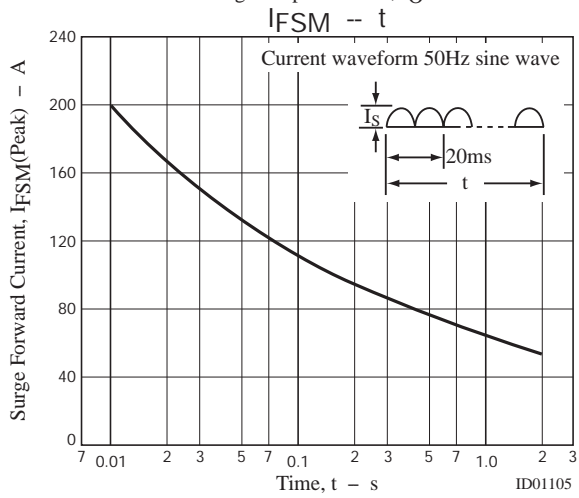
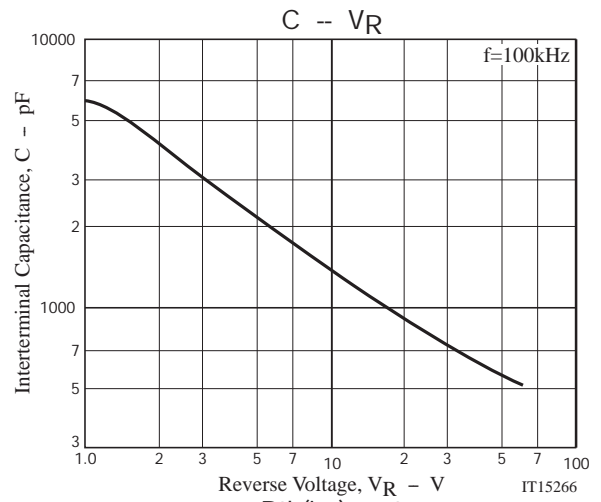
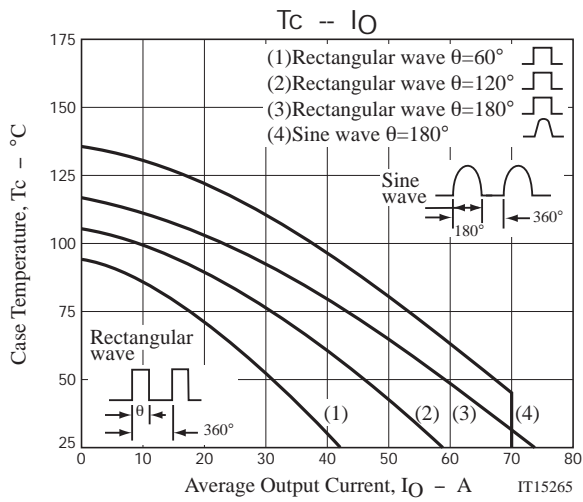


Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V <sub>R</sub>	I <sub>R</sub> =10mA, T <sub>c</sub> =25°C *	60			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =30A, T <sub>c</sub> =25°C *			0.66	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =30V, T <sub>c</sub> =25°C *			1	mA
Interterminal Capacitance	C	V <sub>R</sub> =10V, T <sub>c</sub> =25°C *, f=100kHz		1400		pF
Thermal Resistance	R <sub>th(j-c)</sub>	Junction-Case : Smoothed DC			1.5	°C / W

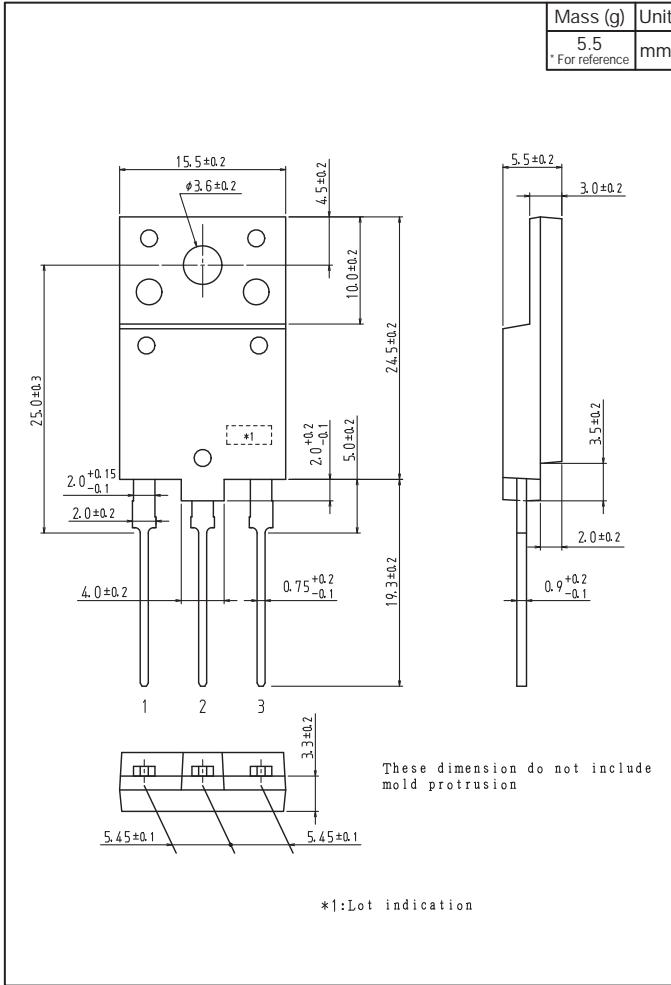
Note) \*: Value per element.





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## Outline Drawing SBT700-06RH-1E



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