



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 $T_a=25^\circ\text{C}$

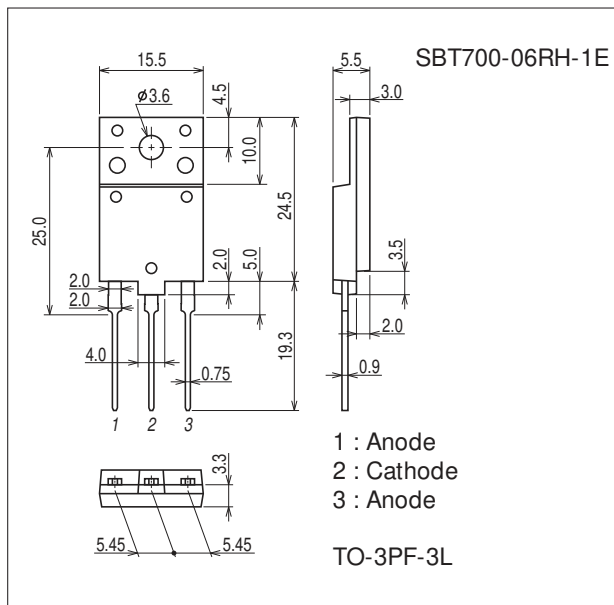
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		60	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		66	V
Average Output Current	I_O	50Hz resistive load, Sine wave $T_c=44^\circ\text{C}$	70	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	200	A
Junction Temperature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

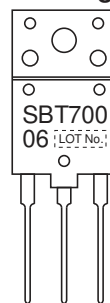
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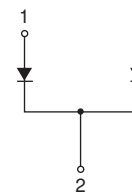
Ordering & Package Information

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

Marking



Electrical Connection

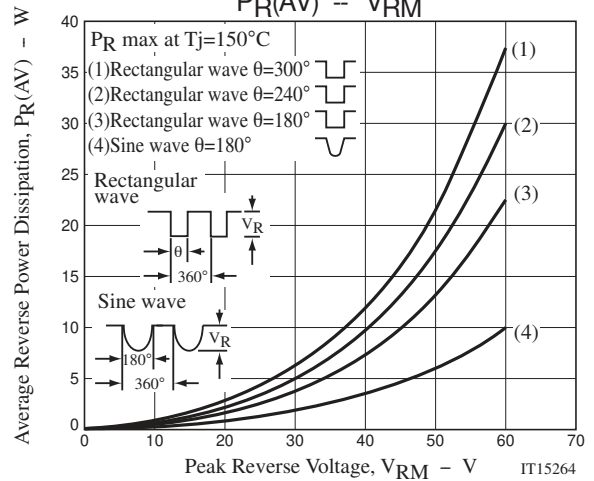
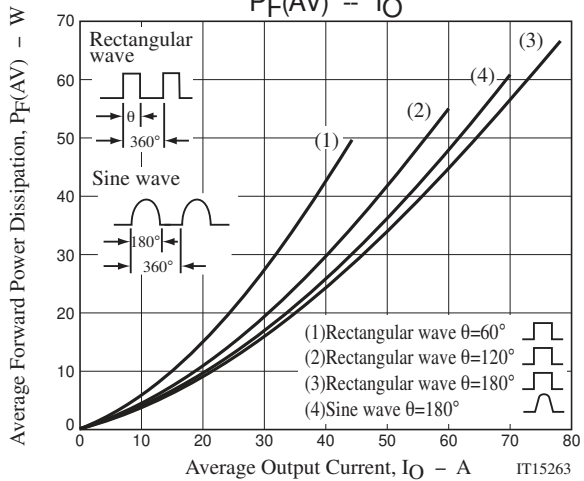
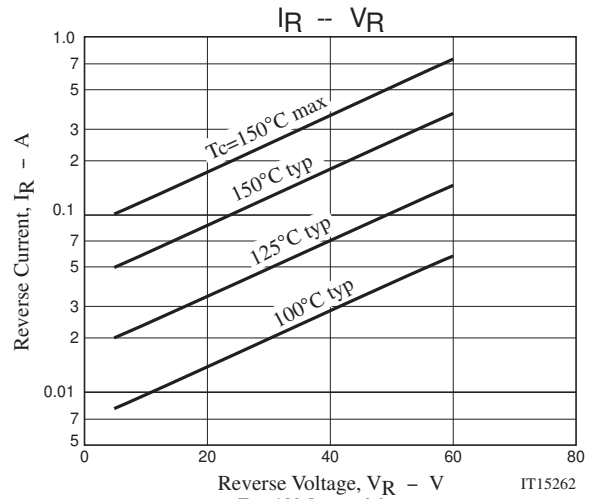
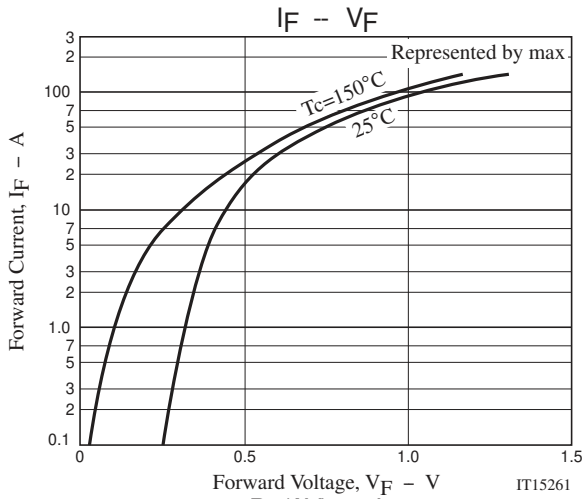


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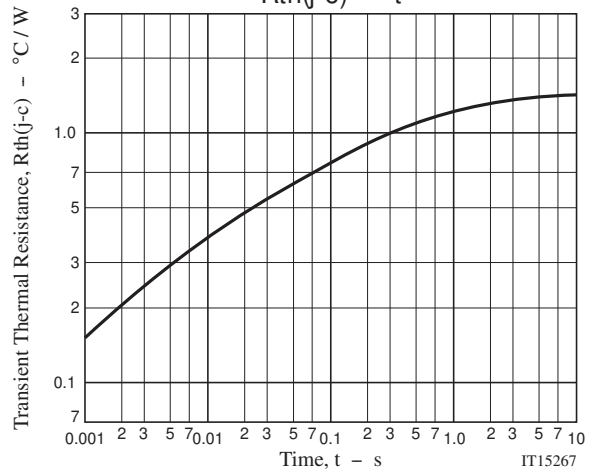
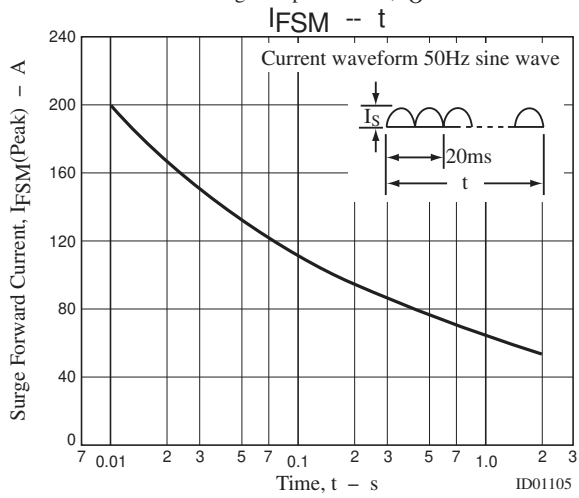
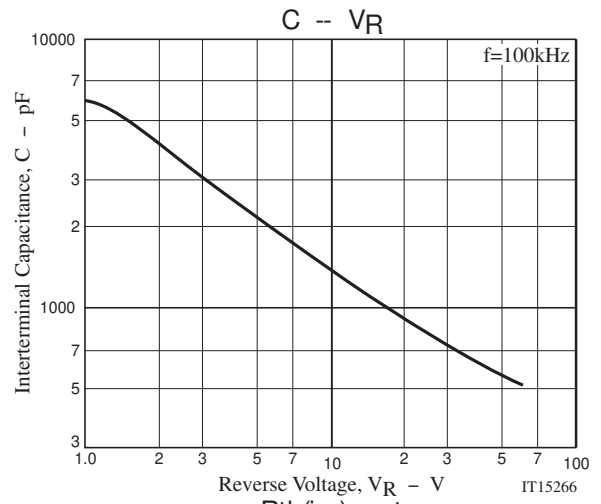
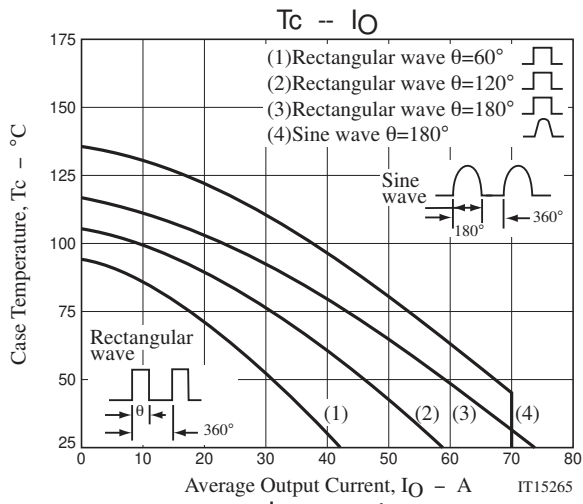
Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=10\text{mA}$, $T_c=25^\circ\text{C}$ *	60			V
Forward Voltage	V_F	$I_F=30\text{A}$, $T_c=25^\circ\text{C}$ *			0.66	V
Reverse Current	I_R	$V_R=30\text{V}$, $T_c=25^\circ\text{C}$ *			1	mA
Interterminal Capacitance	C	$V_R=10\text{V}$, $T_c=25^\circ\text{C}$ *, $f=100\text{kHz}$		1400		pF
Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC			1.5	$^\circ\text{C} / \text{W}$

Note) *: Value per element.



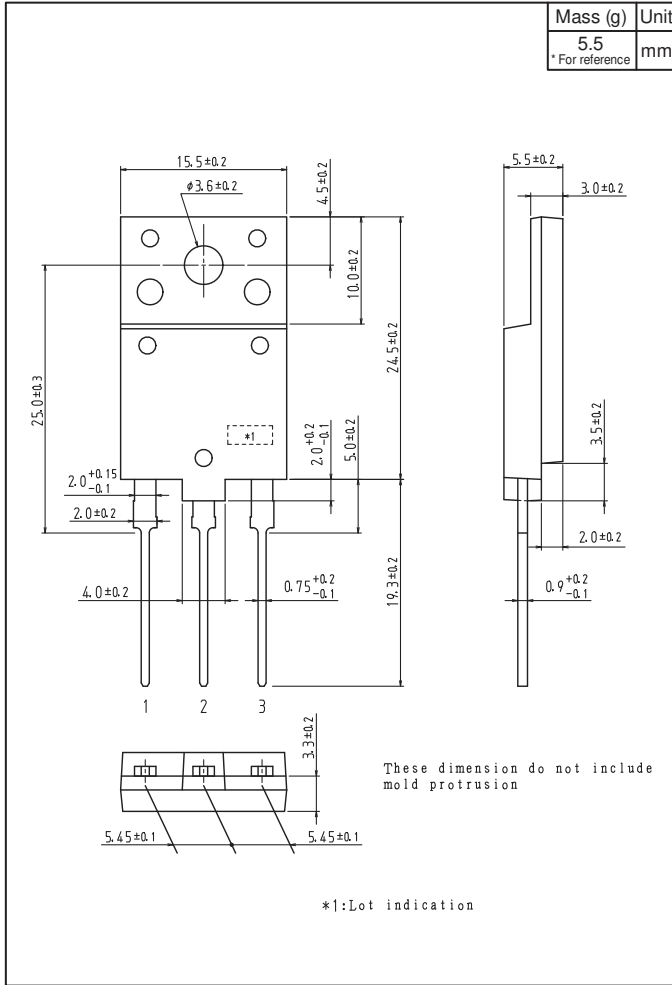
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Outline Drawing

SBT700-06RH-1E



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