

Device Type	Features	Page	VRM	Io	Package
<u>PH965C6</u>	Super LLD(For PFC circuit) ,hp 20A/600V	3	600V max	7A max	TO-247(FE,JEDEC)
<u>PH967C6</u>	Super LLD(For PFC circuit) ,hp 30A/600V	3	600V max	10A max	TO-247(FE,JEDEC)
<u>YA971S6R</u>	Super LLD2(For PFC circuit) ,ho 8A/600V	3	600V max	8A max	TO-220AB
<u>YA972S6R</u>	Super LLD2(For PFC circuit) ,ho 10A/600V	3	600V max	10A max	TO-220AB
<u>YA975C6R</u>	Super LLD2(For PFC circuit) ,ho 20A/600V	3	600V max	20A max	TO-220AB
<u>YG961S6R</u>	Super LLD(For PFC circuit) ,hp 8A/600V	3	600V max	2.5A max	TO-220F
<u>YG962S6R</u>	Super LLD(For PFC circuit) ,hp 10A/600V	3	600V max	3.5A max	TO-220F
<u>YG963S6R</u>	Super LLD(For PFC circuit) ,hp 15A/600V	3	600V max	5A max	TO-220F
<u>YG971S6R</u>	Super LLD2(For PFC circuit) ,ho 8A/600V	3	600V max	8A max	TO-220F
<u>YG972S6R</u>	Super LLD2(For PFC circuit) ,ho 10A/600V	3	600V max	10A max	TO-220F
<u>YG975C6R</u>	Super LLD2(For PFC circuit) ,ho 20A/600V	3	600V max	20A max	TO-220F

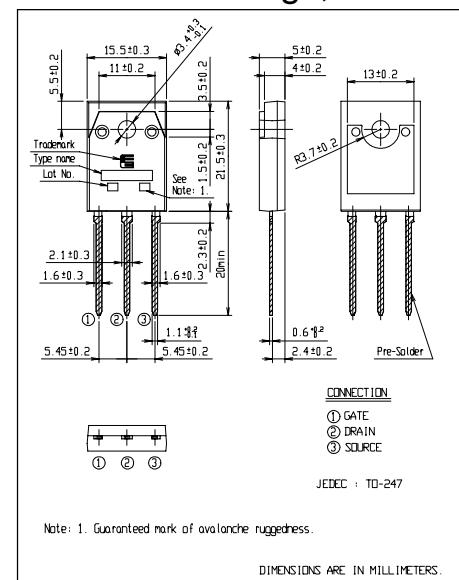
Super LLD (For PFC circuit)

LOW LOSS SUPER HIGH SPEED RECTIFIER

■ Features

- Insulated package by fully molding
- Super high speed switching
- High reliability by planer design

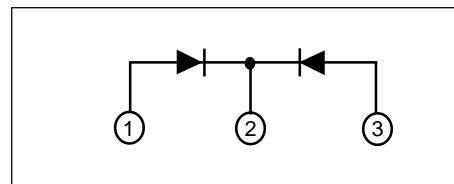
■ Outline drawings, mm



■ Applications

- PFC circuit (current continuous node)

■ Connection diagram



■ Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		600	V
Non-Repetitive peak reverse voltage	V_{RSM}		600	V
Surge peak forward current	I_{PS}	$t_w \leq 200\text{ns}$	40*	A
Peak forward current	I_P		30*	A
Average output current	I_o	duty=1/2, $T_c=110^\circ\text{C}$ Square wave	10*	A
Non-Repetitive surge current	I_{FSM}	Sine wave 10ms, 1shot	40	A
Operating junction temperature	T_j		150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

* Out put current of centertap full wave connection.

- Electrical characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Conditions	Characteristics	Unit
Reverse recovery peak current**	I_{RP}	$I_F=5\text{A}, -di/dt=200\text{A}/\mu\text{s}, V_R=380\text{V} T_j=100^\circ\text{C}$	Typ. 2.5	A
Reverse recovery time **	t_{rr}	$I_F=0.1\text{A}, I_R=0.2\text{A}, I_{rec}=0.05\text{A}$	Max. 30.0	ns
Forward voltage **	V_F	$I_F=15\text{A}$	Max. 5.0	V
Reverse current **	I_R	$V_R=V_{RRM}$	Max. 50.0	μA
Thermal resistance	$R_{th(j-c)}$	Junction to case	Max. 1.5	$^\circ\text{C/W}$

** Rating per element

- Mechanical characteristics

Mouunting torque	Recommended torque	0.4 to 0.6	N·m
Approximate mass		4.9	g