

## 60A, 100V Low Forward Voltage Schottky Rectifiers

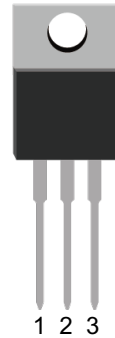
### FEATURES

- Trench MOS schottky barrier rectifiers
- Low forward voltage drop
- High efficiency, low power loss
- High temperature soldering guaranteed:  
270°C/10 seconds for TO-220AB and ITO-220AB  
260°C/10 seconds for TO-263AB
- RoHS compliant

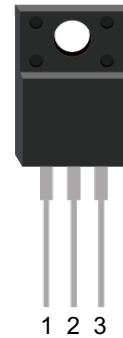
### MECHANICAL DATA

- Case: TO-220AB, ITO-220AB, TO-263AB
- Case material: molding compound meets UL 94V-0 flammability rating
- Polarity: as marked on case body

TO-220AB

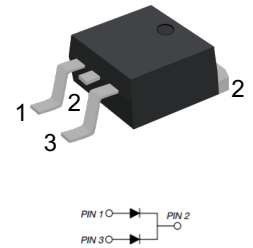


ITO-220AB


 RoHS  
COMPLIANT

 HALOGEN  
FREE  
AVAILABLE

TO-263AB



P/N	Package
ST60U100CT	TO-220AB
ST60U100FCT	ITO-220AB
ST60U100TA	TO-263AB

### TYPICAL APPLICATION

General purpose use in AC to DC bridge full wave rectification for SMPS, lighting, adapter, charger, home appliance, office equipment and telecommunication.

### MAXIMUM RATINGS

$T_A=25^\circ\text{C}$  unless otherwise noted

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Average Forward Rectified Current	$I_{F(AV)}$	60	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	$I_{FSM}$	400	A
Operating Junction Temperature Range	$T_J$	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

$T_A=25^\circ\text{C}$  unless otherwise noted

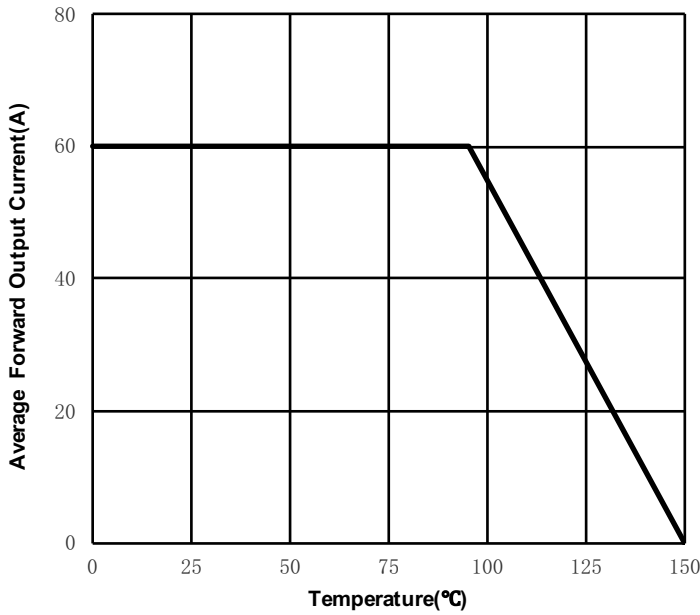
Parameter	Test Conditions	Symbol	Value		Unit
			Typ.	Max.	
Forward Voltage@ $I_F=30\text{A}$	$T_A=25^\circ\text{C}$	$V_F$	0.68	0.72	V
	$T_A=125^\circ\text{C}$		0.61	0.65	V
Reverse Current @ $V_{RRM}$	$T_A=25^\circ\text{C}$	$I_R$	25	70	$\mu\text{A}$
	$T_A=125^\circ\text{C}$		15	50	mA
Typical Thermal Resistance TO-220AB, TO-263AB ITO-220AB		$R_{\theta JC}$	2		$^\circ\text{C/W}$
			4		

# 60A, 100V Low Forward Voltage Schottky Rectifiers

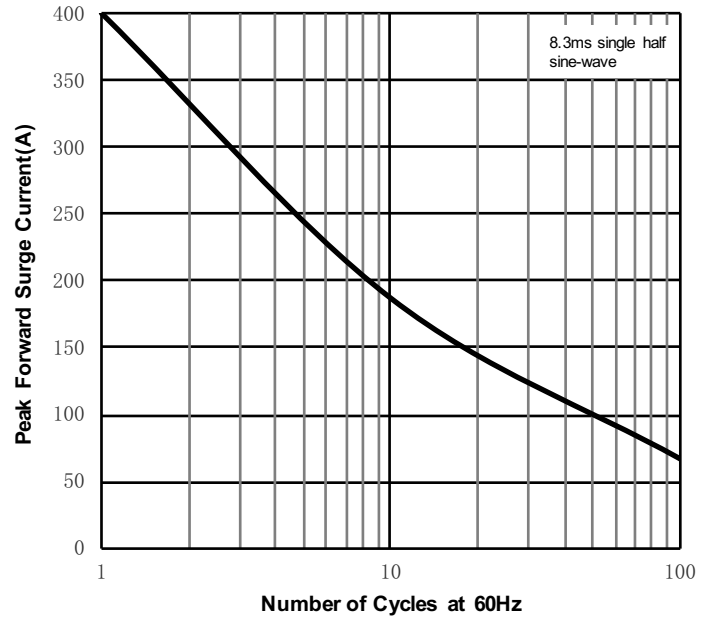
## RATINGS AND CHARACTERISTIC CURVES

$T_A=25^\circ\text{C}$  unless otherwise noted

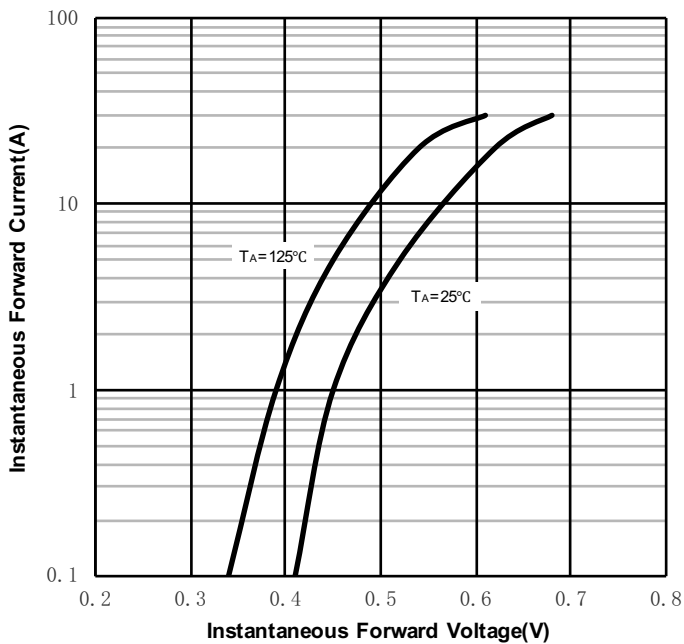
**FIG.1: Forward Output Current Derating Curve**



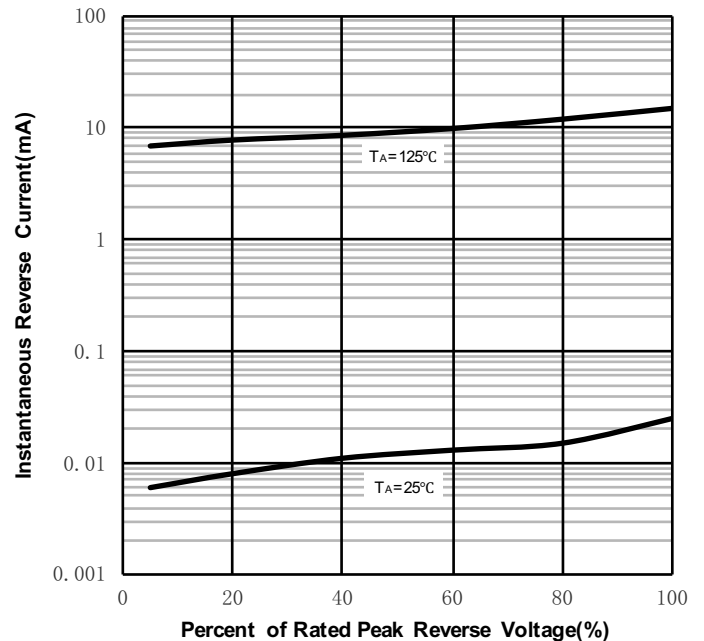
**FIG.2: Maximum Non-Repetitive Peak Forward Surge Current**



**FIG.3: Typical Forward Characteristics**



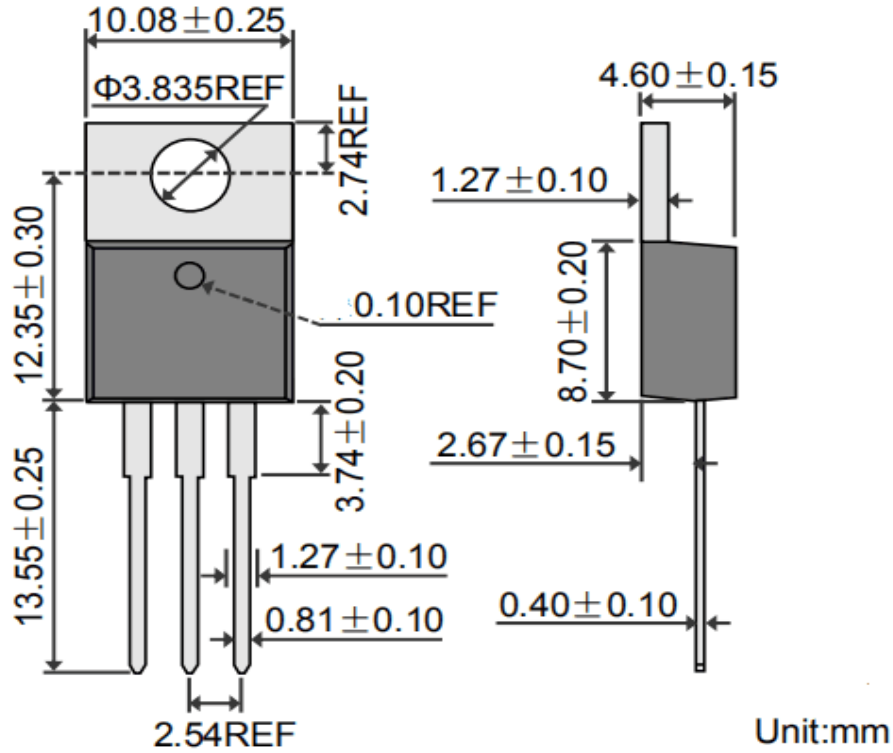
**FIG.4: Typical Reverse Characteristics**



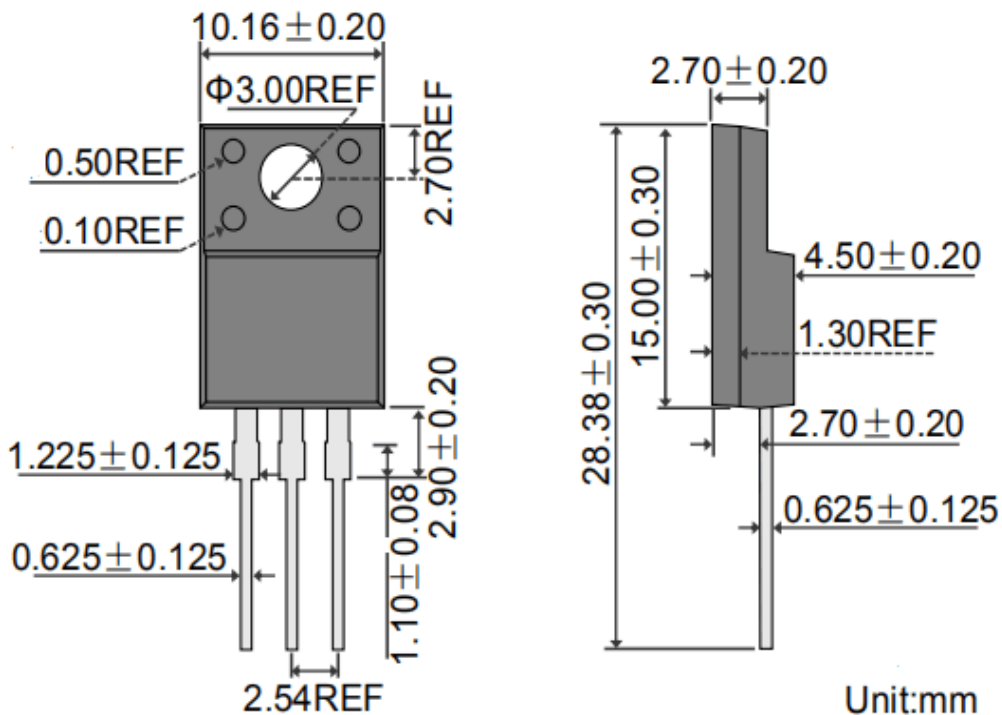
## 60A, 100V Low Forward Voltage Schottky Rectifiers

### PACKAGE OUTLINE DIMENSIONS

#### TO-220AB

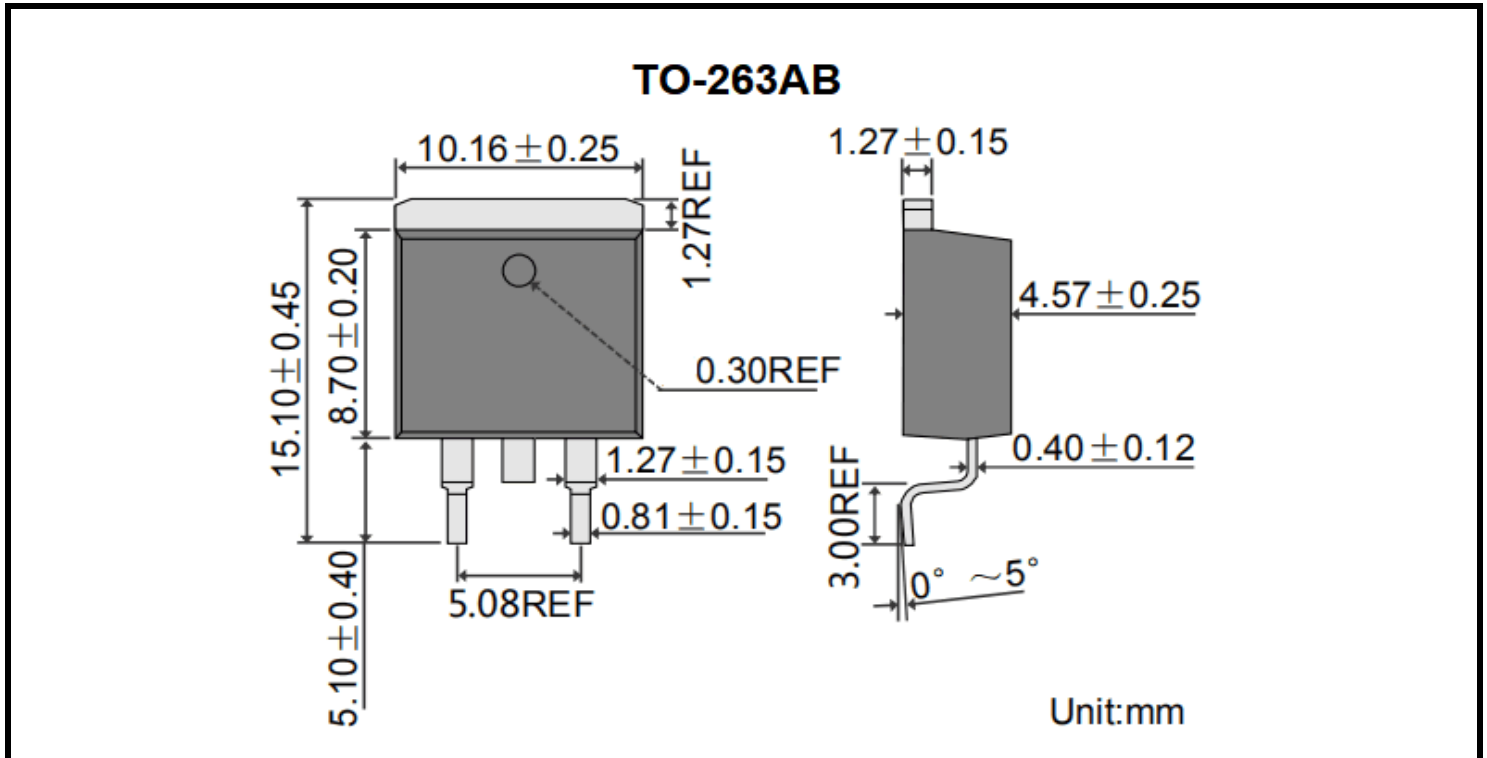


#### ITO-220AB



## 60A, 100V Low Forward Voltage Schottky Rectifiers

### PACKAGE OUTLINE DIMENSIONS



### PACKING INFORMATION

Package	Tube(PCS)	Inner Box(PCS)	Carton(PCS)
TO-220AB	50	1,000	5,000
ITO-220AB	50	1,000	5,000
TO-263AB	50	1,000	5,000