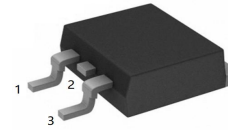


20A, 30V Low Forward Voltage Schottky Rectifier

FEATURES

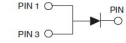
- Planar MOS schottky rectifier
- Low forward voltage drop
- Low power loss, high efficiency
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- RoHS compliant

TO-263AB



RoHS
COMPLIANT

HALOGEN
FREE
AVAILABLE



MECHANICAL DATA

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

TYPICAL APPLICATION

General purpose use in AC/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}	30	V
Average Forward Rectified Current	$I_{F(AV)}$	20	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I_{FSM}	300	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@ $I_F=19\text{A}$	$T_A=25^{\circ}\text{C}$	V_F	0.42	0.435	V		
	$T_A=125^{\circ}\text{C}$		0.35	0.37			
Forward Voltage@ $I_F=20\text{A}$	$T_A=25^{\circ}\text{C}$		0.43	0.45			
	$T_A=125^{\circ}\text{C}$		0.36	0.39			
Forward Voltage@ $I_F=40\text{A}$	$T_A=25^{\circ}\text{C}$		0.515	0.54			
	$T_A=125^{\circ}\text{C}$		0.44	0.46			
Reverse Current @ $V_{RRM}=15\text{V}$	$T_A=25^{\circ}\text{C}$		I_R	70		200	μA
	$T_A=125^{\circ}\text{C}$			5		15	mA
Reverse Current @ $V_{RRM}=30\text{V}$	$T_A=25^{\circ}\text{C}$	150		500	μA		
	$T_A=125^{\circ}\text{C}$	10		30	mA		
Typical Thermal Resistance		$R_{\theta JC}$		15		$^{\circ}\text{C}/\text{W}$	

20A, 30V Low Forward Voltage Schottky Rectifier

RATINGS AND CHARACTERISTIC CURVES

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

FIG.1: Forward Output Current Derating Curve

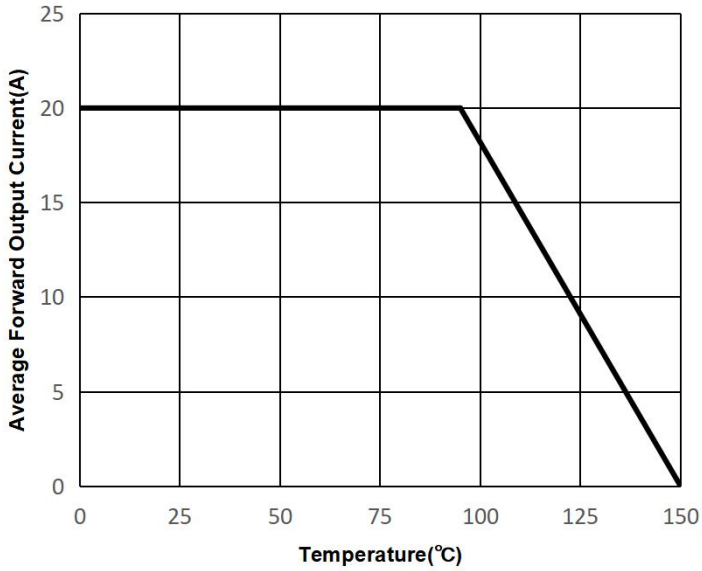


FIG.2: Maximum Non-Repetitive Peak Forward Surge Current

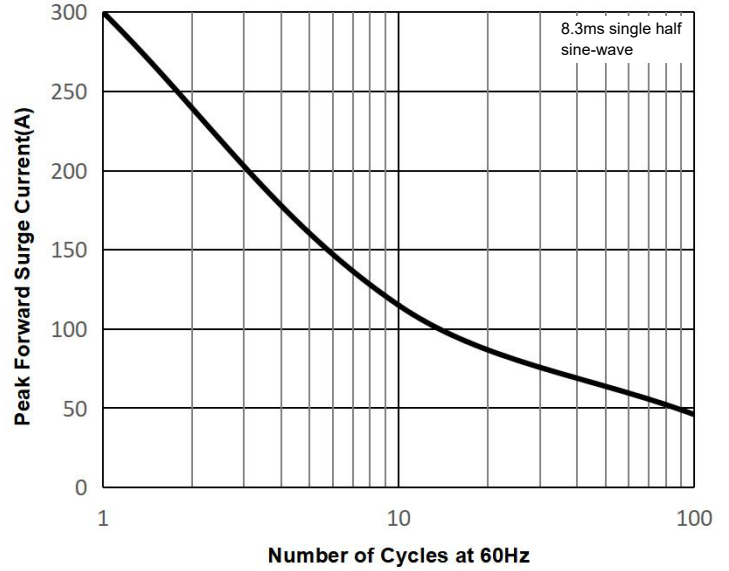


FIG.3: Typical Forward Characteristics

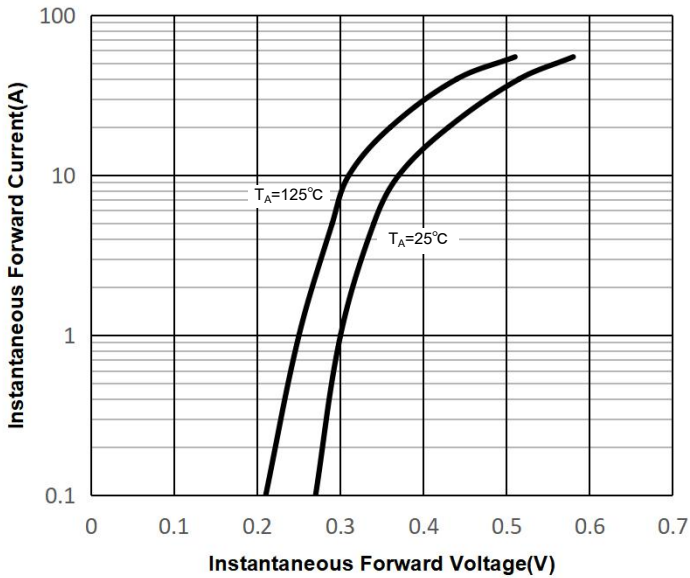
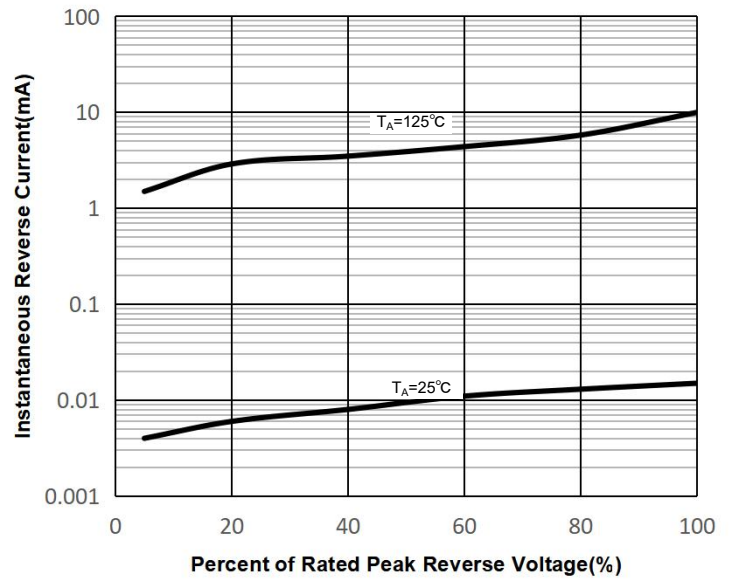
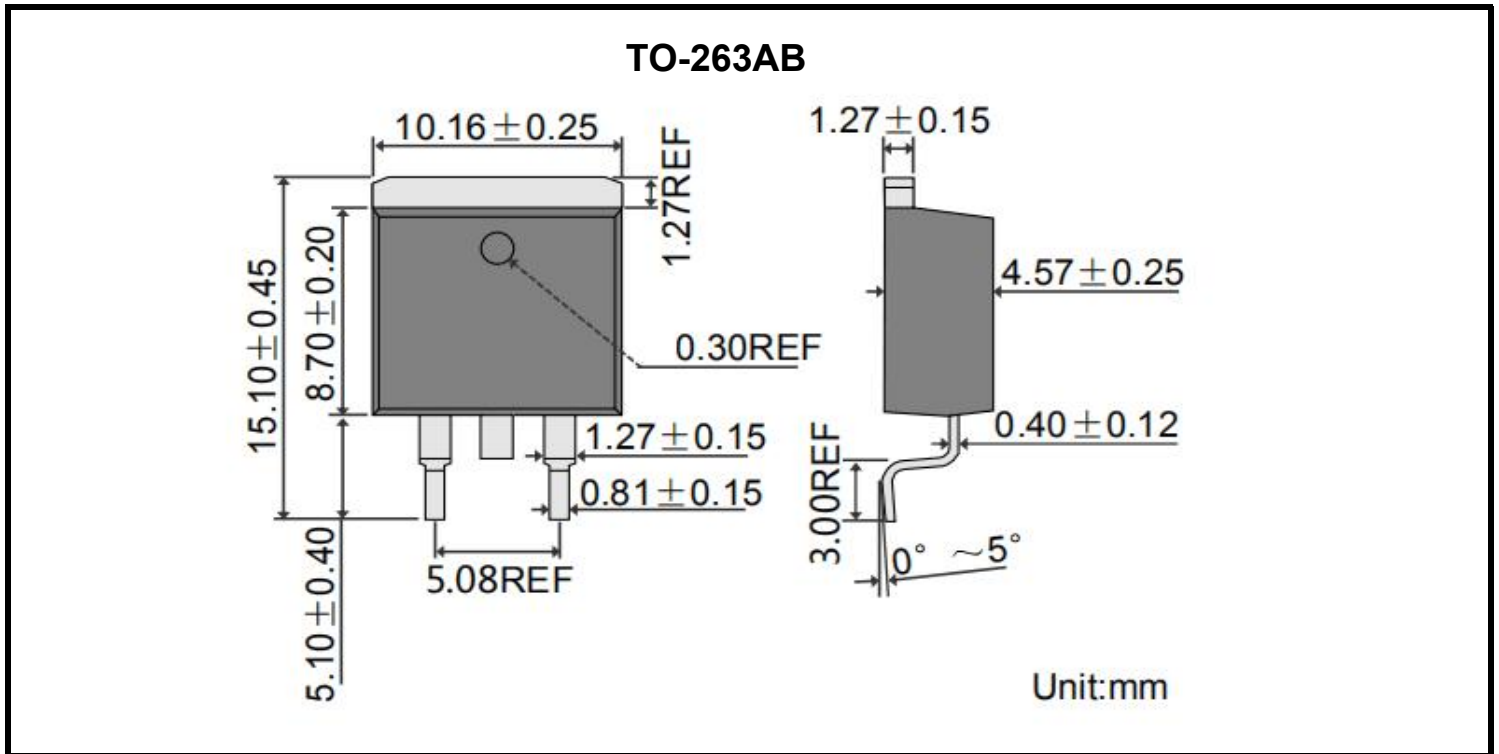


FIG.4: Typical Reverse Characteristics



20A, 30V Low Forward Voltage Schottky Rectifier

PACKAGE OUTLINE DIMENSIONS



PACKING INFORMATION

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