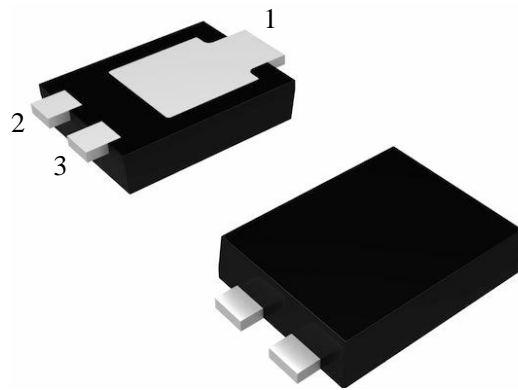
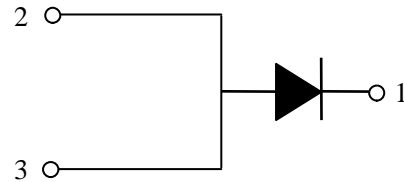


## 60V Trench MOS Barrier Schottky Low VF 0.505V@10A, 25 °C

### Features

- Trench MOS schottky technology
- Low stored charge Majority Carrier Conduction
- Ultra low forward voltage drop
- Low leakage current
- Low power loss and high efficiency
- High surge capacity
- ESD rating:>20K volts

10 Amperes, 60 Volts



### Typical Application

Schottky rectifier design for high frequency switched mode power supplies, such as adaptators and on board DC/DC converters.

TO-277

### Mechanical Data

Case: JEDEC TO-277 molded plastic

Terminals: Plated leads, solderable per  
MIL-STD-750, Method 2026

Mounting Position: Any

### Device Summary

Symbol	Value
$I_F(AV)$	10A
$V_{RRM}$	60V
$V_F(Typical)$	0.505V
$T_j(max)$	150 °C

**Note:** Pins 2 & 3 must be electrically connected at the printed circuit board.

Major Rating and Characteristics				
Symbol	Parameter		Values	Units
$V_{RRM}$	Repetitive peak reverse voltage		60	V
$T_J$	Storage temperature range		-55 to 150	$^{\circ}\text{C}$
$I_{FSM}$	Surge non repetitive forward current	10 ms sine or 6 ms rect. pulse	300	A
$I_{F(AV)}$	Maximum average forward current 50 % duty cycle, rectangular waveform $T_c=35^{\circ}\text{C}$		10	

### Electrical characteristic ( $T_A=25^{\circ}\text{C}$ )

Parameter	Symbol	Spec. Limit			Unit
		Min.	Typ.	Max.	
Max. Repetitive Peak Reverse Voltage @0.5mA	$V_{RRM}$	62	70		V
Max. Average Forward Rectified Current	$I_{F(AV)}$			10	A
Forward Voltage Drop	@ $I_F=3\text{A}$ @ $I_F=10\text{A}$		0.41 0.505	0.44	V
Max. Reverse Current at $V_{RRM}$ @60V	$I_R$		30	70	$\mu\text{A}$
Operating Temperature Range	$T_J$	-55		+125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55		+150	$^{\circ}\text{C}$

Thermal Characteristics( $T_A=25^{\circ}\text{C}$ unless otherwise noted)			
Parameter	Symbol	SK10U60AAP	UNIT
Typical thermal resistance	$R_{JA}^{(1)}$	45	$^{\circ}\text{C}/\text{W}$
	$R_{JM}^{(2)}$	1.3	

#### Notes

- (1) Free air, mounted on recommended PCB, 2oz.pad area; thermal resistance  $R_{JA}$ -junction to ambient
- (2) Cathode pad dimensions 18.8mm x 14.4mm. Anode pad dimensions 5.6mm x 14.4mm;  $R_{JM}$ -junction to mount

## Characteristics Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Typical Forward Voltage Characteristics

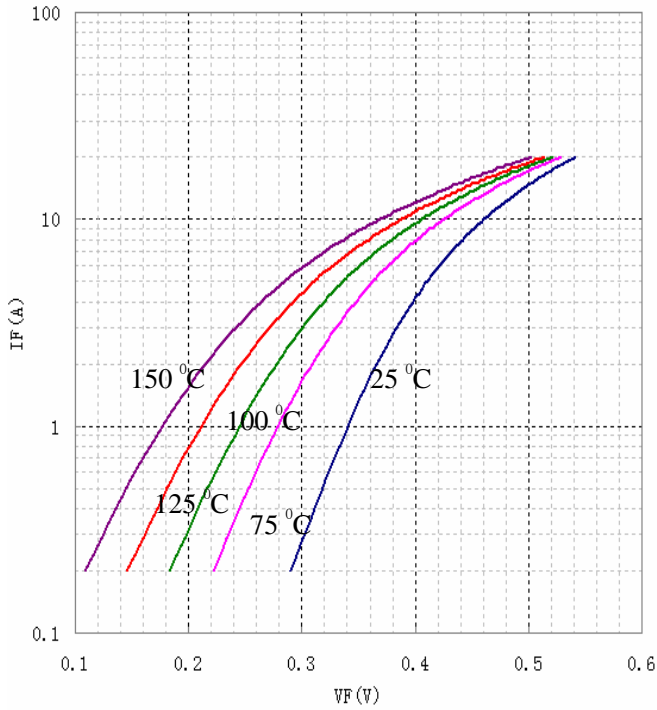


Fig.2 Typical Reverse Leakage Characteristics

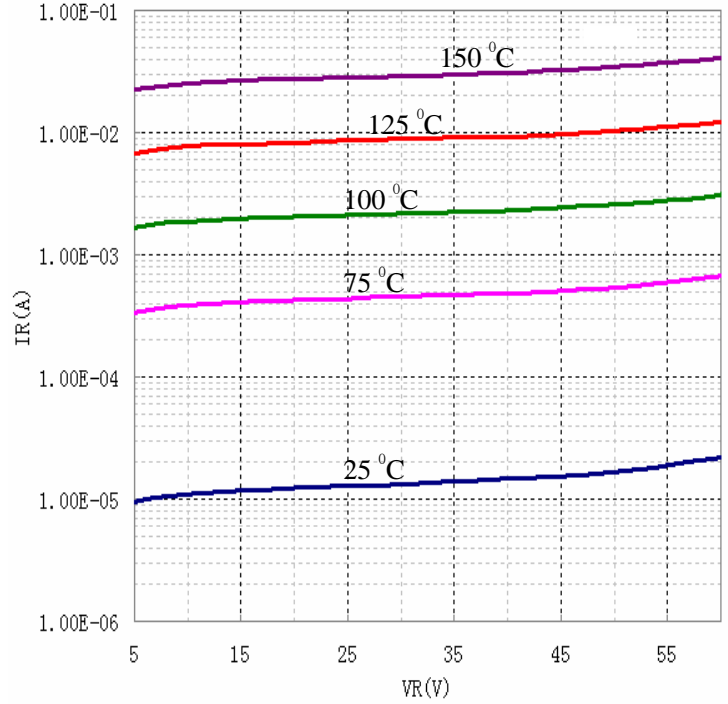
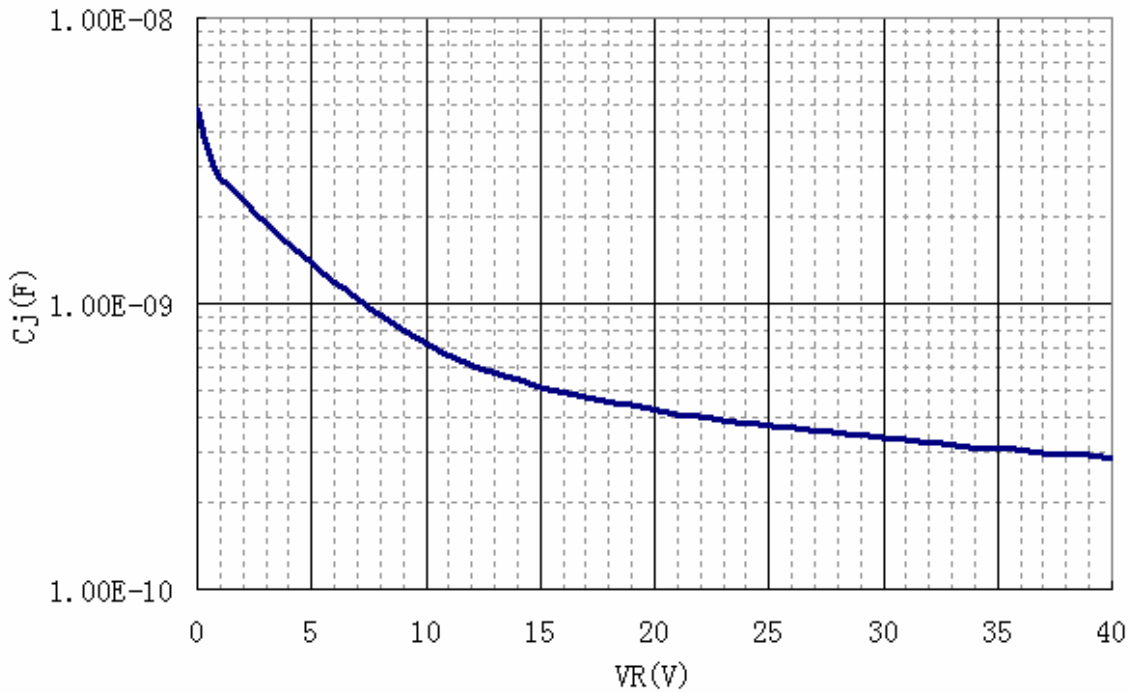


Fig.3 Junction capacitance versus reverse voltage applied (typical values)



## Package Outline Dimensions in Millimeters

