

T_J175°C SMPC4.6U TRENCH SCHOTTKY 45V AND 60V, AEC-Q101 QUALIFIED

The TSUPxM45SH & TSUPxM60SH Schottky rectifiers offer low leakage current and low forward voltage drop. The series devices are optimized for the automotive applications with low power loss, high efficiency – maximum leakage current is only 20mA at high temperature operation.

The series devices include 5A/10A/15A forward current and maximum VRRM is 45V/60V. All these capabilities are packed into SMPC4.6U (TO-277A compatible) package. This is a wettable flank package, it enhances the solder joint and AOI testability. It is also low profile with typical height of 1.1mm, RoHS compliant and halogen free.

PIN DEFINITION:



KEY FEATURES & ADVANTAGES:

- AEC-Q101 qualified
- Trench Schottky technology
- Very low profile typical height of 1.1mm
- Excellent high temperature stability
- High forward surge capability
- Low power loss, high efficiency
- Ideal for automated placement
- Wettable flank
- Moisture sensitivity level: level 1, per J-STD-020
- RoHS Compliant
- Halogen-free according to IEC 61249-2-21



APPLICATION:

- Switching mode power supply (SMPS)
- Adapters
- Lighting application
- On-board DC/DC converter
- Automotive charger
- Reverse polarity protection



SMPC4.6U - WETTABLE FLANK:

More robust design to enhance the solder joint and AOI testability.





COMPARABLE ALTERNATIVE					
TSC	VISHAY				
TSUP10M45SH	V10PM45				
TSUP15M45SH	V15PM45				
TSUP10M60SH	V10PM6				
TSUP15M60SH	V15PM6				

KEY PERFORMANCE										
PART NUMBER	V _{RRM} [V]	۱ _۴ [۸]	V _F TYP[V] @T _J 25°C	V _F MAX[V] @T _J 25°C	V _F TYP[V] @T _J 125℃	V _F MAX [V] @T _J 125℃	I _{FSM} [A]	I _R [mA] @T _J 25°C	I _R [mA] @T _j 125℃	
TSUP5M45SH	45	5	0.49(2.5A) 0.54(5A)	0.6(5A)	0.39(2.5A) 0.46(5A)	0.54(5A)	110	0.15	6	
TSUP10M45SH	45	10	0.5(5A) 0.54(10A)	0.6(10A)	0.39(5A) 0.46(10A)	0.54(10A)	220	0.2	9	
TSUP15M45SH	45	15	0.48(7.5A) 0.51(15A)	0.6(15A)	0.37(7.5A) 0.44(15A)	0.54(15A)	290	0.35	20	
TSUP5M60SH	60	5	0.52(2.5A) 0.59(5A)	0.64(5A)	0.45(2.5A) 0.57(5A)	0.6(5A)	110	0.2	7	
TSUP10M60SH	60	10	0.53(5A) 0.61(10A)	0.64(10A)	0.45(5A) 0.56(10A)	0.6(10A)	220	0.25	15	
TSUP15M60SH	60	15	0.52(7.5A) 0.58(15A)	0.64(15A)	0.43(7.5A) 0.53(15A)	0.6(15A)	290	0.45	20	

ORDERING INFORMATION									
PART NUMBER	OUTLINE (PACKAGE)	REEL (PCS)	REEL SIZE (INCH)	INNER BOX (PCS)	CARTON (PCS)	CARTON SIZE (MM)	GROSS WEIGHT (KG/CARTON)		
TSUP5M45SH S1G	SMPC4.6U	1,500	7	6,000	30,000	390*210*230	6.6		
TSUP5M45SH S2G	SMPC4.6U	6,000	13	12,000	60,000	360*356*230	13.11		
TSUP10M45SH S1G	SMPC4.6U	1,500	7	6,000	30,000	390*210*230	6.6		
TSUP10M45SH S2G	SMPC4.6U	6,000	13	12,000	60,000	360*356*230	13.11		
TSUP15M45SH S1G	SMPC4.6U	1,500	7	6,000	30,000	390*210*230	6.6		
TSUP15M45SH S2G	SMPC4.6U	6,000	13	12,000	60,000	360*356*230	13.11		
TSUP5M60SH S1G	SMPC4.6U	1,500	7	6,000	30,000	390*210*230	6.6		
TSUP5M60SH S2G	SMPC4.6U	6,000	13	12,000	60,000	360*356*230	13.11		
TSUP10M60SH S1G	SMPC4.6U	1,500	7	6,000	30,000	390*210*230	6.6		
TSUP10M60SH S2G	SMPC4.6U	6,000	13	12,000	60,000	360*356*230	13.11		
TSUP15M60SH S1G	SMPC4.6U	1,500	7	6,000	30,000	390*210*230	6.6		
TSUP15M60SH S2G	SMPC4.6U	6,000	13	12,000	60,000	360*356*230	13.11		

Samples of Part Number can be ordered on Product Detail page: www.taiwansemi.com/en/products/details/PartNumber

For pricing and more information, please contact TSC sales or authorized distributors worldwide: www.taiwansemi.com/en/contact