Schottky Barrier Rectifier STPS15L60CB

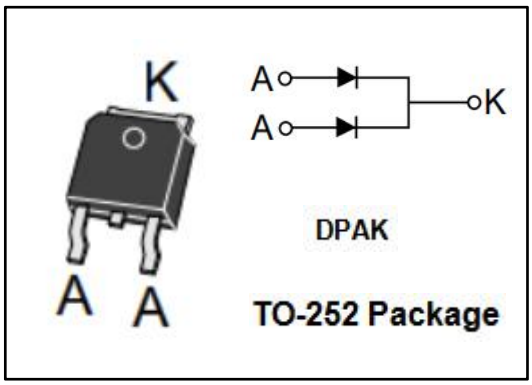
FEATURES

·Multi-layer Metal -Silicon Potential Structure

·Low Leakage Current

·High Current Capability, High Efficiency

·High Junction Temperature Capability



MECHANICAL CHARACTERISTICS

·Low Voltage High Frequency Switching Power Supply

·Low Voltage High Frequency Invers Circuit

·Low Voltage Continued Circuit and Protection Circuit

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	60	V
$I_{F(AV)}$	Average Rectified Forward Current Per device	115	A
I_{FSM}	Non-repetitive Peak Surge Current	75	A
$I_{F(RSM)}$	Forward rms current	10	A
P_D	Repetitive peak avalanche power	265	W
T_J	Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case Per diode	4	℃/W
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case Total	2.4	℃/W

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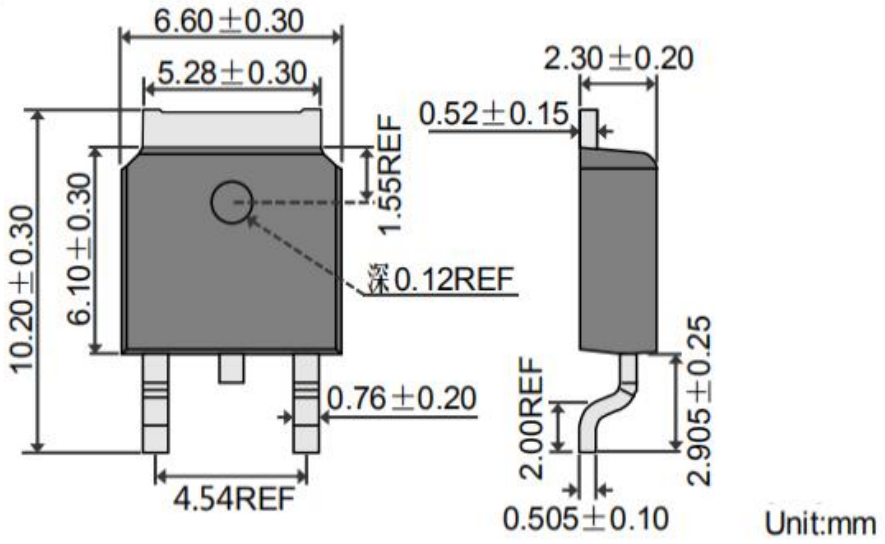
ELECTRICAL CHARACTERISTICS(T_a=25℃)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 7.5A;Tc = 25℃	0.62	V
V_F	Maximum Instantaneous Forward Voltage	I_F= 7.5A ;Tc = 125℃	0.76	V
V_F	Maximum Instantaneous Forward Voltage	I_F= 12A ;Tc = 25℃	0.57	V
V_F	Maximum Instantaneous Forward Voltage	I_F= 12A ;Tc = 125℃	0.76	V
V_F	Maximum Instantaneous Forward Voltage	I_F= 15A ;Tc = 25℃	0.82	V
V_F	Maximum Instantaneous Forward Voltage	I_F= 15A ;Tc = 125℃	0.72	V
I_R	Maximum Instantaneous Reverse Current	V_R= $V_{RWM;}$Tc = 25℃	200	uA
I_R	Maximum Instantaneous Reverse Current	V_R= $V_{RWM;}$Tc = 125℃	60	Ma
t_{rr}	Maximum Reverse Recovery Time	I_F =0.5A;I_R=1A	30	ns

PACKAGE OUTLINE (UNIT: MM)



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