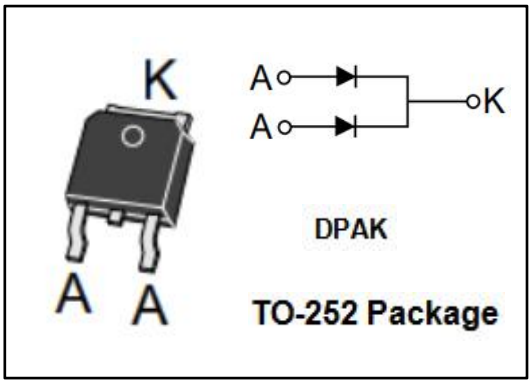
Schottky Barrier Rectifier 12CWQ10FN

FEATURES

- With TO-252(DPAK) packaging
- Low power loss
- High efficiency
- High frequency operation
- High surge capacity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Switching power supply
- High frequency inverters
- Freewheeling diodes
- Reverse battery protection
- Polarity protection applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RMS} V_R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current @Tc=135℃	12	A
$I_{F(RMS)}$	Forward rms current@Tc=135℃	24	A
I_{FSM}	Nonrepetitive Peak Surge Current (10ms single half sine-wave superimposed on rated load conditions,60Hz)	320	A
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	1.5	℃/W

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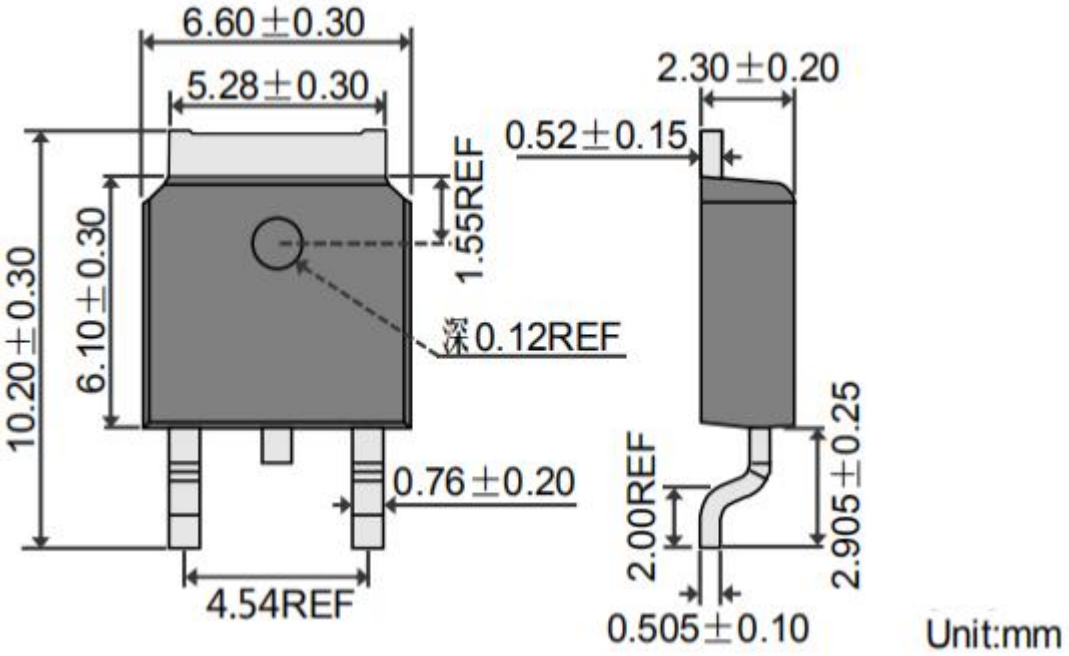
ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 6A ;Tc= 25℃	0.8	V
		I_F= 6A ;Tc= 125℃	0.65	
		I_F= 12A ;Tc= 25℃	0.95	
		I_F= 12A ;Tc= 125℃	0.78	
I_R	Maximum Instantaneous Reverse Current	V_R= rated V_{RRM}; Tc= 25℃	1.0	mA
		V_R= rated V_{RRM}; Tc= 125℃	4.0	



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