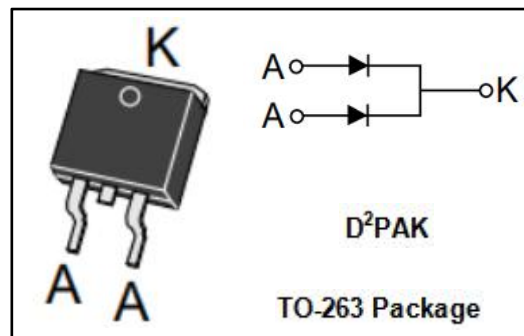


Schottky Barrier Rectifier

STPS40170CG

FEATURES

- Plastic material used carriers Unerwriter Laboratory
- Metal silicon rectifier, majonty carrier conduction
- Low Power Loss,High Efficiency
- Guard ring for transient protection
- High Surge Capability,High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- For use in low voltage ,high frequency inverters,free wheeling and polarity protection applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	170	V
I _{F(AV)}	Average Rectified Forward Current	40	A
I _{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	250	A
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-40~150	°C
dv/dt	Voltage Rate of Change (Rated V _R)	10,000	V/ μ s

THERMAL CHARACTERISTICS

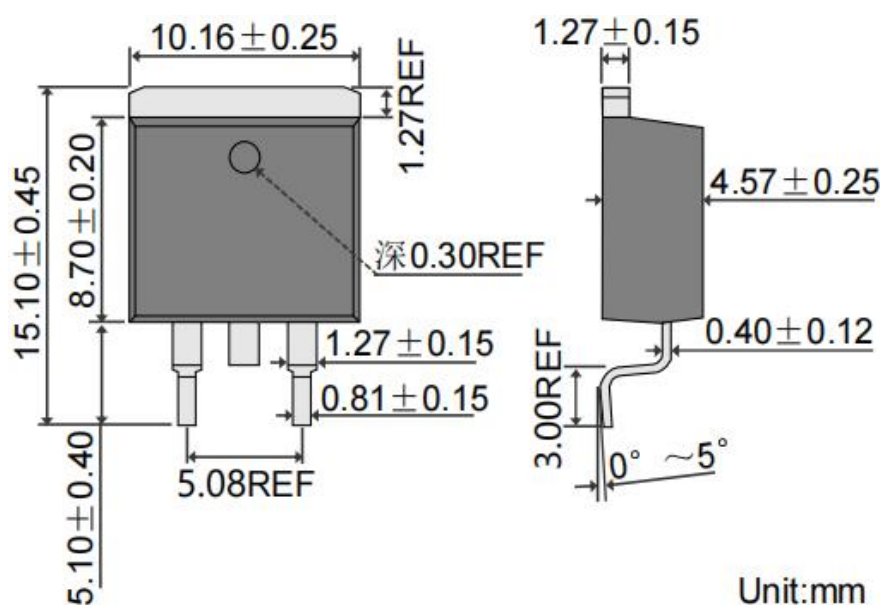
SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	1.2	°C/W

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ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 20A$; $T_c = 25^\circ C$	0.92	V
		$I_F = 20A$; $T_c = 125^\circ C$	0.8	
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}$; $T_c = 25^\circ C$	30	μA
		$V_R = V_{RWM}$; $T_c = 125^\circ C$	30	mA

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