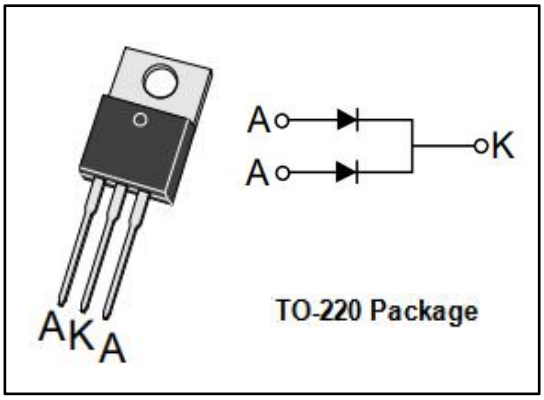
Schottky Barrier Rectifier — STPS60170CT

FEATURES

- Guard -Ring for Stress Protection
- Low Forward Voltage
- High Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High surge capability
- Low Stored Charge Majority Carrier Conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260℃ Max. for 10 Seconds

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	170	V
$I_{F(AV)}$	Average Rectified Forward Current	60	A
I_{FSM}	Nonrepetitive Peak Surge Current	270	A
T_J	Junction Temperature	-65~175	℃
T_{stg}	Storage Temperature Range	-65~175	℃
dv/dt	Voltage Rate of Change (Rated V_R)	10,000	V/μs

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.0	℃/W

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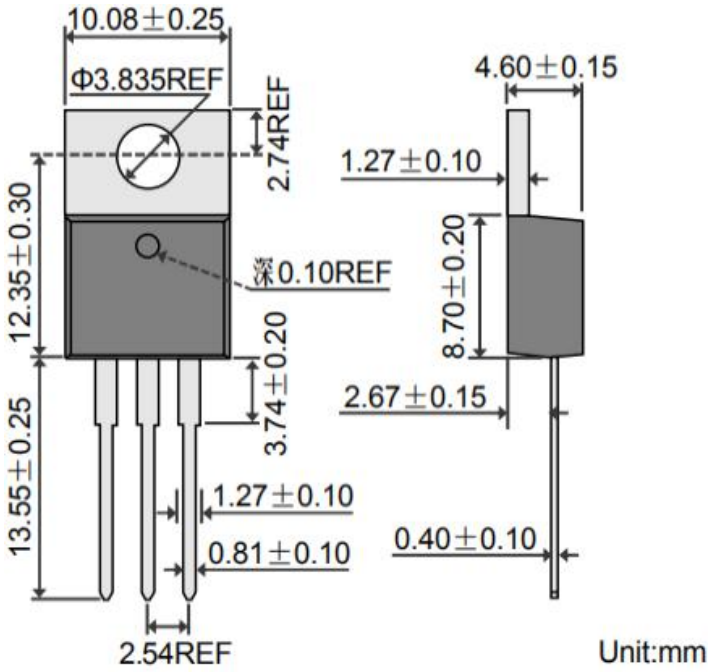
ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 30A ; T_C= 25℃ I_F= 30A ; T_C= 125℃ I_F= 60A ; T_C= 25℃ I_F= 60A ; T_C= 125℃	0.94 0.76 1.05 0.92	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T_C= 25℃	35	uA
		Rated DC Voltage, T_C= 125℃	35	mA



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