

Schottky Barrier Rectifier
STPS1017CB
FEATURES

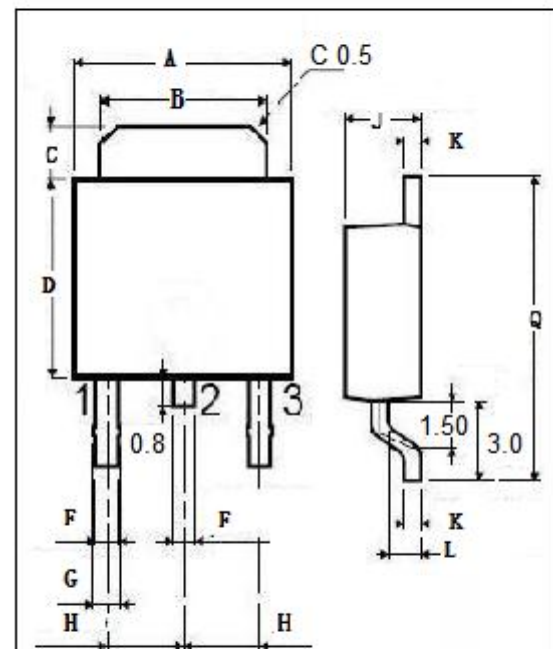
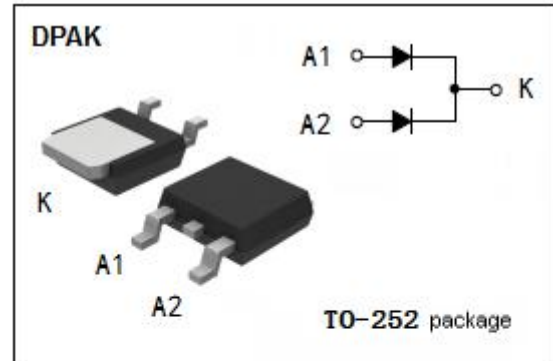
- Low leakage current
- Avalanche capability specified
- High junction temperature capability
- Good trade-off between leakage current and forward voltage drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

MECHANICAL CHARACTERISTICS

- Dual centre tab schottky rectifier designed for high frequency switch mode power supplies

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

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 (Rated V_R)	10	A
$I_{F(RMS)}$	RMS Forward Current	10	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	75	A
T_J	Junction Temperature	-65~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^{\circ}\text{C}$
dv/dt	Voltage Rate of Change (Rated V_R)	10,000	V/ μs



DIM	mm	
	MIN	MAX
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
F	0.65	
G	0.75	
H	2.10	2.50
J	2.10	2.40
K	0.40	0.60
L	0.90	1.10
Q	9.90	10.1

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.7	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	2.4	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 5A ; T _C = 25°C I _F = 5A ; T _C = 125°C I _F = 10A ; T _C = 25°C I _F = 10A ; T _C = 125°C	0.92 0.75 1.0 0.85	V
I _R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 125°C Rated DC Voltage, T _C = 25°C	10 10	mA uA

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