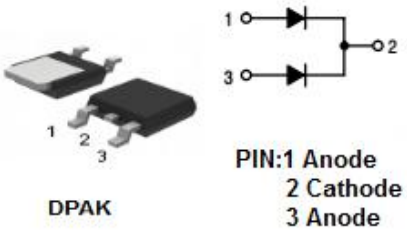
Schottky Barrier Rectifier — SBR1045CTL

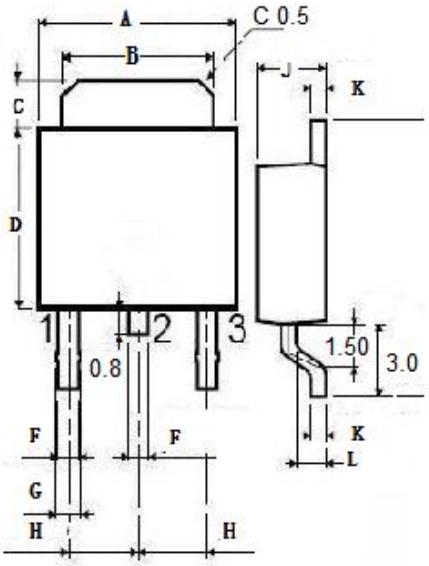
FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss/High Efficiency
- High Surge Capability
- High Current Capability
- Low Forward Voltage Drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low-voltage,high frequency inverters,free wheeling and polarrity protection applications





DIM	mm MIN	mm 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

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	45	V
$V_{R(RMS)}$	RMS Reverse Voltag	31	V
$I_{F(AV)}$	Average Rectified Forward Current (Rated V_R) T_C= 125℃	10	A
I_{FSM}	Non-repetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	90	A
T_J	Junction Temperature	-65~150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

Schottky Barrier Rectifier SBR1045CTL

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	2.5	℃/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 5A ; T_C= 25℃ I_F= 5A ; T_C= 85℃	0.55 0.53	V
I_R	Maximum Instantaneous Reverse Current	V_R=45V, T_C= 25℃ V_R=45V, T_C= 125℃	0.5 100	mA