


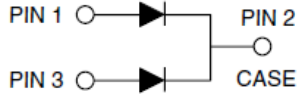
1、Description

For use in high frequency inverters, switching powersupplies, freewheeling diodes, OR-ing diode, dc-to-dcconverters and reverse battery protection.

2、Features

- Trench MOS Schottky technology
- High efficiency operation
- Low Forward Voltage Drop
- Low powerlosses
- Soft, Fast Switching Capability

3、Pinning information

PIN	Description	Simplified outline	Symbol
1	Anode (A)	 TO-220	
2	Cathode(K)		
3	Anode (A)		

4、Quick reference data

SYMBOL	PARAMETER	MAX	UNIT
V_{RRM}	Repetitive peak off-state voltages	120	V
$I_{F(AV)}$	Maximum average forward rectified current	15 x 2	A
I_{FSM}	Peak forward surge current,	150	A

5、Limiting value

Ratings at 25°C ambient temperature unless otherwise specified.

SYMBOL	PARAMETER	MIN	MAX	UNIT
V_{RRM}	Maximum repetitive peak reverse voltage	-	120	V
$I_{F(AV)}$	Maximum average forward rectified current	-	15 x 2	A
I_{FSM}	Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	-	150	A
T_{stg}	Storage temperature	-40	150	°C
T_j	Operating junction temperature	-40	150	°C

6、Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	CONDITIONS	MIN	Typ	MAX	UNIT
V_F	Instantaneous forward voltage per diode	$I_F = 3\text{A}, T_A = 25^\circ\text{C}$		0.53		V
		$I_F = 15\text{A}, T_A = 25^\circ\text{C}$			0.92	V
		$I_F = 3\text{A}, T_A = 125^\circ\text{C}$		0.50		V
		$I_F = 15\text{A}, T_A = 125^\circ\text{C}$		0.75		V
I_R	Maximum peak reverse Current	$V_R = 90\text{V}, T_A = 25^\circ\text{C}$			11	uA
		$V_R = 90\text{V}, T_A = 125^\circ\text{C}$			8	mA

7. Electrical Characteristics Curve

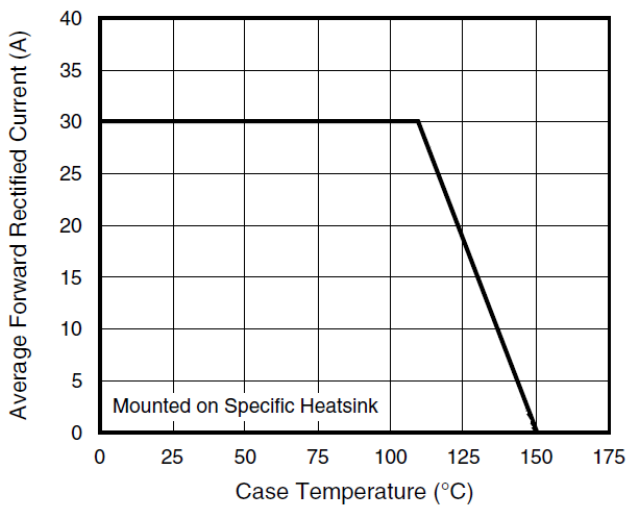


Figure 1. Maximum Forward Current Derating Curve

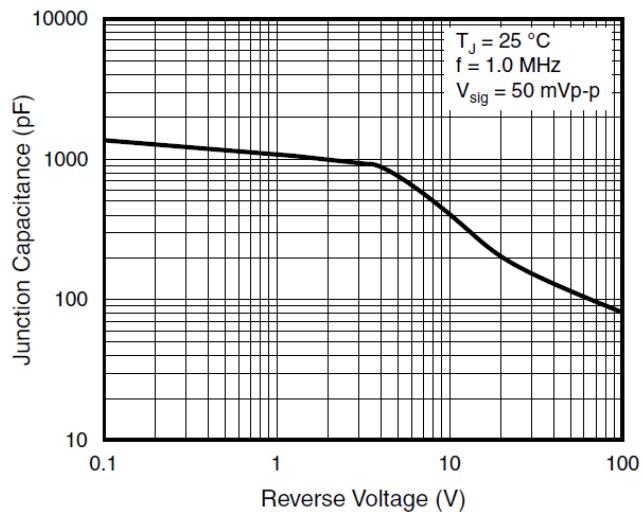


Figure 2. Typical Junction Capacitance Per Diode

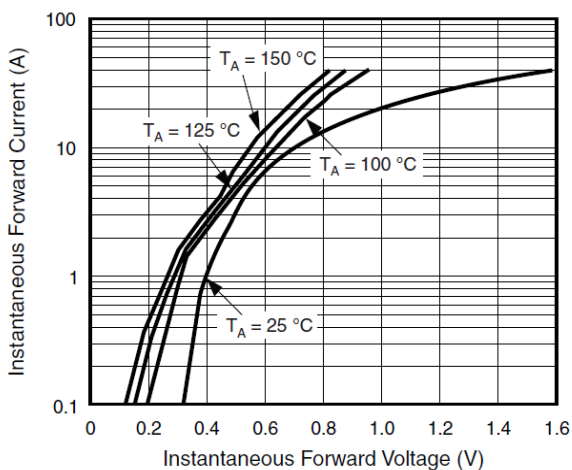


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

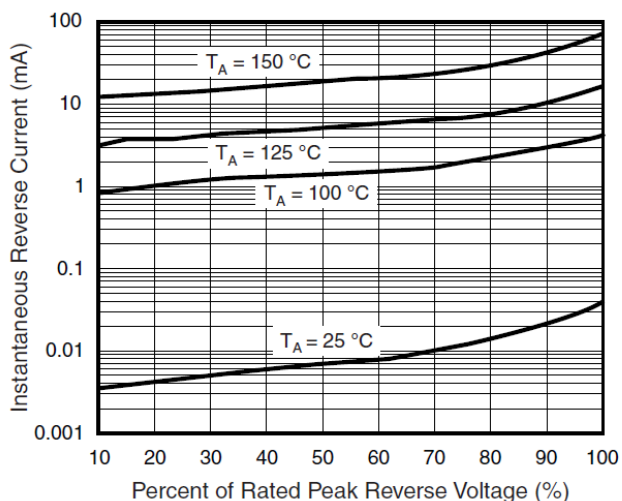
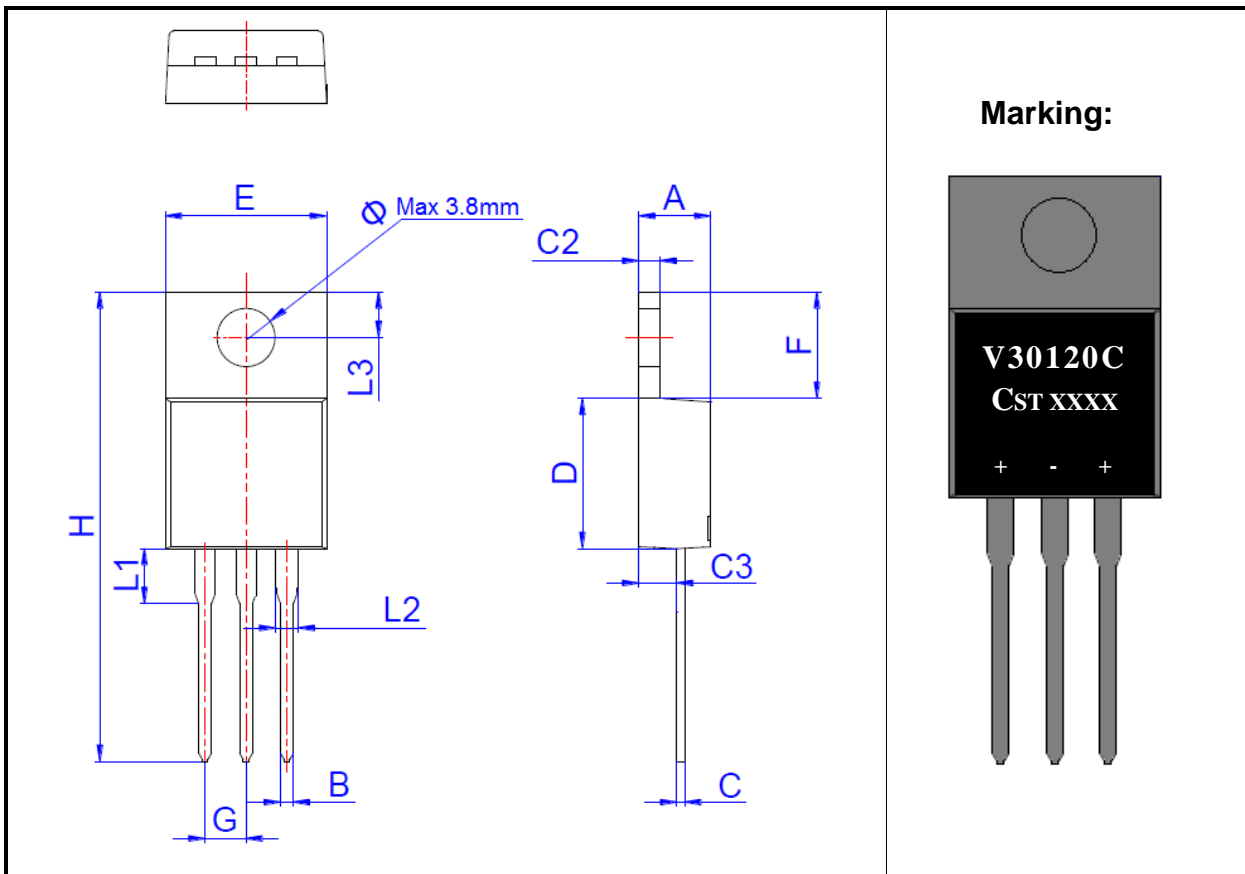


Figure 4. Typical Reverse Characteristics Per Diode

8. Package outline (TO-220)



DIM	Milimeters			Inches		
	Min	Type	Max	Min	Type	Max
A	4.40	-	4.60	0.173	-	0.181
B	0.70	-	0.90	0.028	-	0.035
C	0.37	-	0.42	0.015	-	0.017
C2	1.23	-	1.32	0.048	-	0.052
C3	2.35	-	2.65	0.093	-	0.104
D	8.30	-	9.30	0.327	-	0.366
E	9.90	-	10.3	0.390	-	0.406
F	6.10	-	6.70	0.240	-	0.264
G		2.54			0.1	
H	28.0	-	29.8	1.102	-	1.173
L1		3.78			0.149	
L2	1.14	-	1.70	0.045	-	0.067
L3	2.65	-	2.95	0.104	-	0.116
Φ		3.80			0.150	