迈诺斯科技

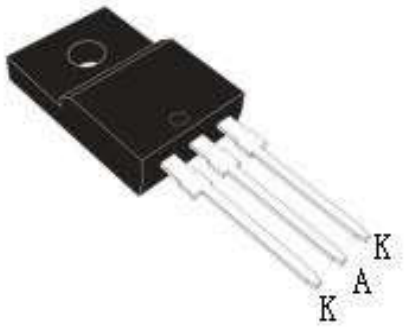
MUR1620CTR

Minos High Power Products

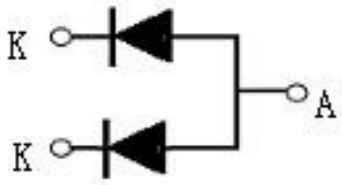
Ultrafast Soft Recovery Diode, 16A

Features:

① Ultrafast Recovery
② 175°C operating junction temperature
③ High frequency operation
④ Low power loss, less RFI and EMI
⑤ Low IR value
⑥ High surge capacity
⑦ Epitaxial chip construction



TO-220F



Product Summary	
V_R	200V
$I_{F(AV)}$	8*2A
t_{rr}	20ns

Description/Applications

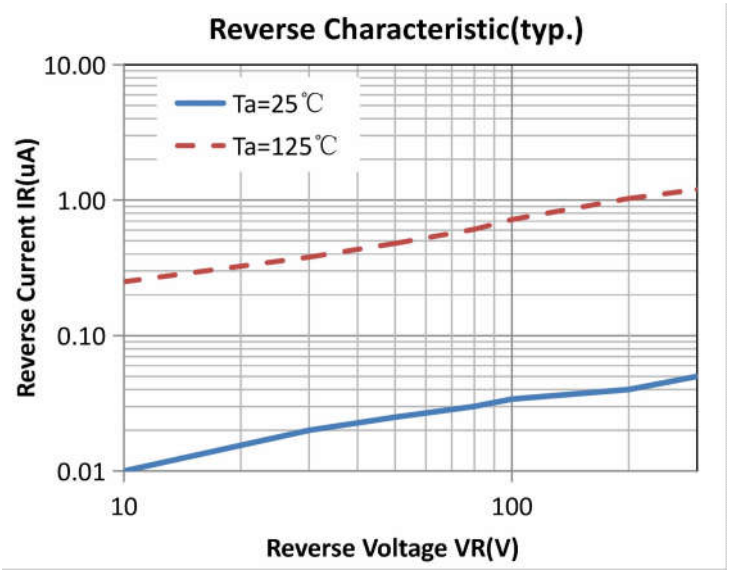
These diodes are optimized to less losses and EMI/RFI in high frequency power conditioning system. The soft recovery behavior of the diodes offers the need as snubber in most applications. These devices are ideally suited for HF welding power converters and other applications where the switching losses are not significant portion of the total losses.

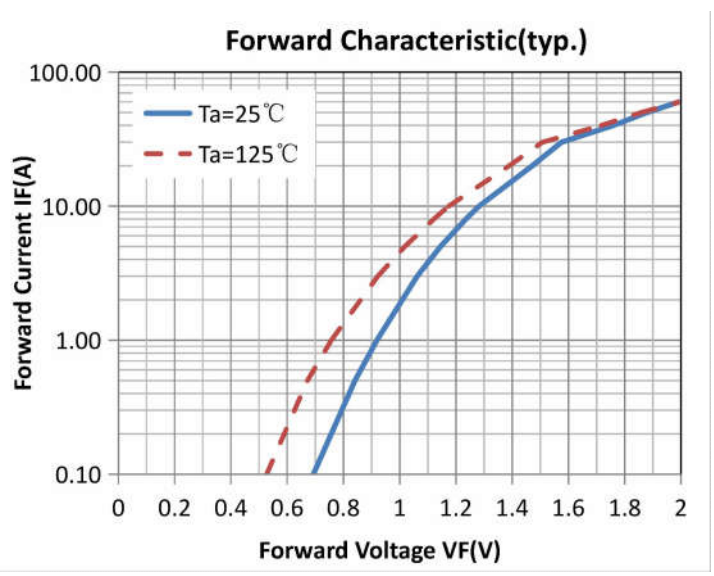
Absolute Maximum Ratings				
Parameter	**Symbol**	**Test Conditions**	**Values**	**Units**
Repetitive peak reverse voltage	V_{RRM}		200	V
Continuous forward current	$I_{F(AV)}$	T_c=110°C	16	A
Single pulse forward current	I_{FSM}	T_c=25°C	96	
Maximum repetitive forward current	I_{FRM}	Square wave, 20kHZ	64	
Operating junction	T_j		175	°C
Storage temperatures	T_{stg}		-55 to +175	°C

Electrical characteristics (Ta=25°C unless otherwise specified)						
Parameter	**Symbol**	**Test Conditions**	**Min**	**Typ.**	**Max.**	**Units**
Breakdown voltage Blocking voltage	V_{BR}, V_R	I_R=100μA	200			V
Forward voltage (Per Diode)	V_F	I_F=8A		0.98	1.15	
		I_F=8A, T_j =125°C		0.9	1.05	
Reverse leakage current(Per Diode)	I_R	V_R= V_{RRM}			10	μA
		T_j=150°C, V_R=200V			100	
Reverse recovery time(Per Diode)	t_{rr}	I_F=0.5A, I_R=1A, I_{RR}=0.25A		25	35	ns
		I_F=1A,V_R=30V, di/dt =200A/us		20	30	

Thermal characteristics

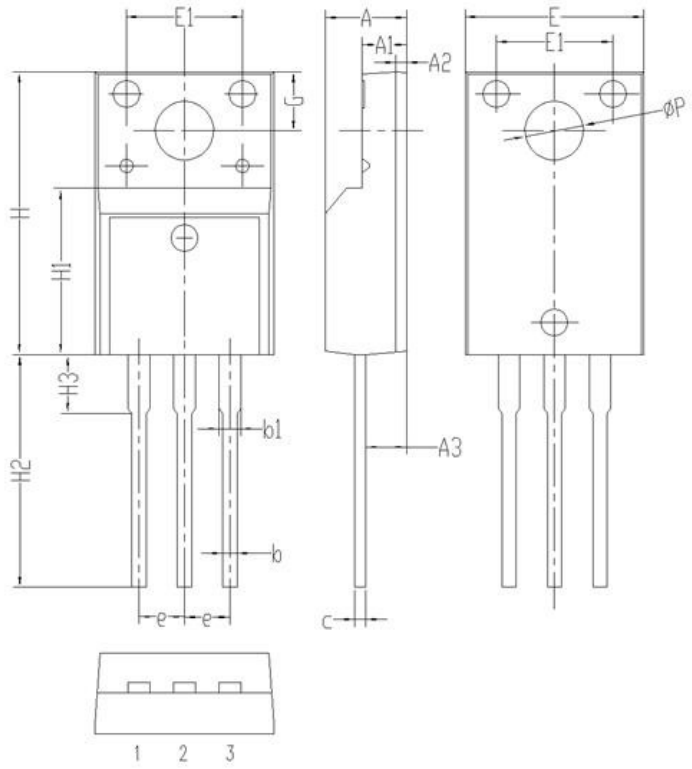
Paramter	**Symbol**	**Typ**	**Units**
Junction-to-Case	$R_{\theta JC}$	4.2	℃/W





Electrical performance (typic)

Package Information



Symbol	Dimensions(millimeters)	
	Min.	Max.
A	4.35	4.75
A1	2.30	2.70
A2	0.40	0.80
A3	2.10	2.50
b	0.60	1.00
b1	1.00	1.40
c	0.30	0.70
e	2.30	2.70
E	9.80	10.2
E1	6.30	6.70
H	15.6	16.0
H1	8.80	9.20
H2	12.9	13.5
H3	3.10	3.50
G	3.10	3.50
ΦP	3.10	3.50

TO-220F PACKAGE

NOTE:

1. Exceeding the maximum ratings of the device in performance may cause damage to the device, even the permanent failure, which may affect the dependability of the machine. Please do not exceed the absolute maximum ratings of the device when circuit designing.
2. When installing the heat sink, please pay attention to the torsional moment and the smoothness of the heat sink.
3. MOSFETs is the device which is sensitive to the static electricity, it is necessary to protect the device from being damaged by the static electricity when using it.
4. Shenzhen Minos reserves the right to make changes in this specification sheet and is subject to change withoutprior notice.

CONTACT:

深圳市迈诺斯科技有限公司（总部）

地址：深圳市福田区华富街道田面社区深南中路4026号田面城市大厦22B-22C

邮编：518025

电话：0755-83273777