

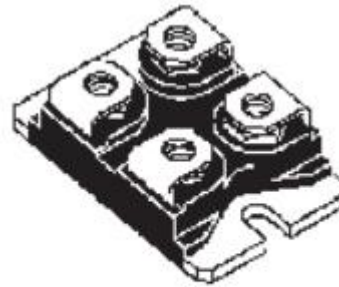
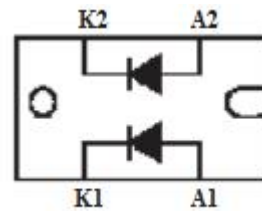
ULTRAFAST HIGH VOLTAGE DIODE

FEATURES

- Ultra-fast and soft recovery
- High frequency operations
- Very low overall power losses
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Motor control freewheel applications
- Booster diode applications



ISOTOP

ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{RRM}	Repetitive Peak Reverse Voltage		600	V
$I_{F(RMS)}$	RMS Forward Current	Per diode	30	A
		Total	60	
I_{FSM}	Surge Forward Current	$t_p=10ms$	230	A
P_D	Total Power Dissipation		278	W
T_J	Junction Temperature		-65~150	°C
T_{stg}	Storage Temperature Range		-65~150	°C

THERMAL CHARACTERISTICS

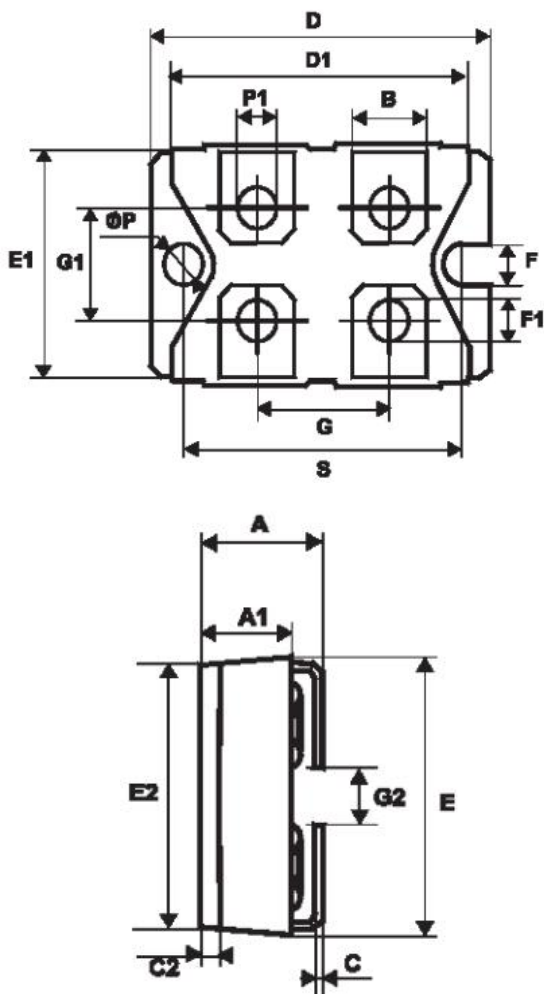
SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	Per diode	1.4
		Total	0.75

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Forward Voltage drop	I _F = 30A, T _J = 25°C	1.75	V
		I _F = 30A, T _J = 125°C	1.5	
I _R	Instantaneous Reverse Current	V _R =600V, T _J = 25°C	150	μA
		V _R =600V, T _J =125°C	8	mA

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")



DIM	mm	
	MIN	MAX
A	10	10.8
A1	8	8.6
B	7.8	8.5
C	0.75	0.85
C2	1.9	2.1
D	35.6	36.8
D1	31	31.6
E	25	25.5
E1	23.5	24.5
E2	24	25.2
G	14.8	15.6
G1	12.5	13
G2	3.5	4.3
F	4.1	4.3
F1	4.5	5
P	4	4.5
P1	4	4.5
S	30	30.5