

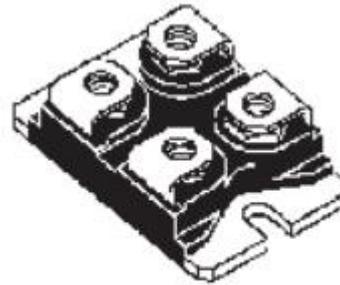
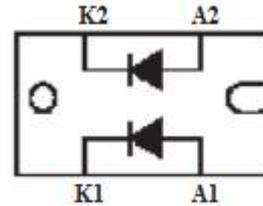
ULTRAFAST HIGH VOLTAGE DIODE

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

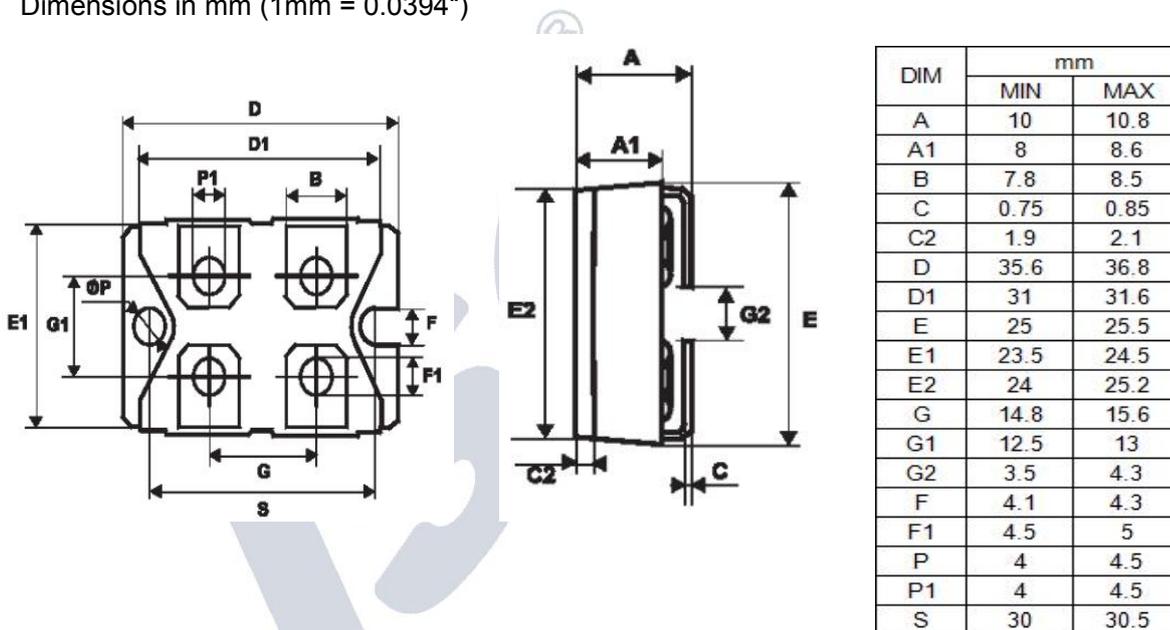
SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	Per diode	1.4
		Total	0.75

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	μ A
		V _R =600V, T _J =125°C	8	mA

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")



NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.