

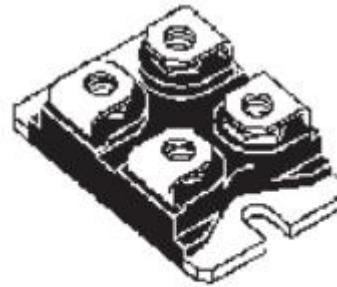
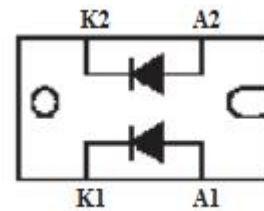
ULTRAFAST HIGH VOLTAGE DIODE

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

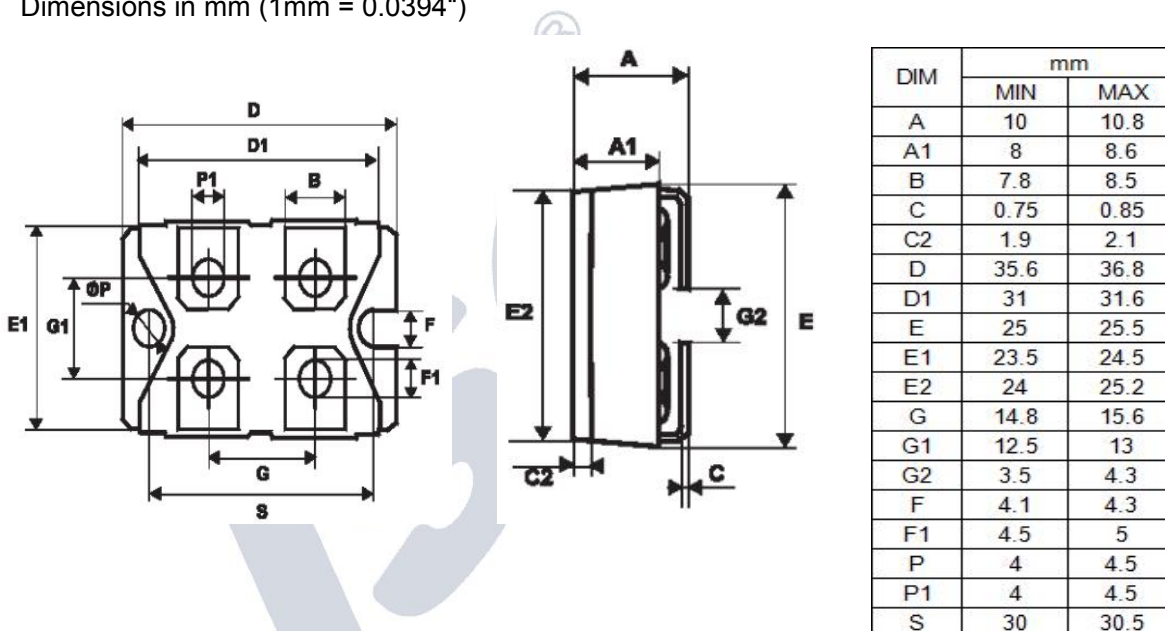
SYMBOL	PARAMETER		MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	Per diode	1.4	°C/W
		Total	0.75	

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Forward Voltage drop	$I_F = 30A, T_J = 25^\circ C$	1.75	V
		$I_F = 30A, T_J = 125^\circ C$	1.5	
I_R	Instantaneous Reverse Current	$V_R = 600V, T_J = 25^\circ C$	150	μA
		$V_R = 600V, T_J = 125^\circ C$	8	mA

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")


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