

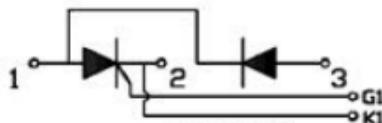


PRODUCT FEATURES

- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- High Surge Current Capability
- Low Inductance Package

APPLICATIONS

- DC Motor Control and Drives
- Battery Charges ,Heater controls,Light dimmers
- Temperature control



ABSOLUTE MAXIMUM RATINGS

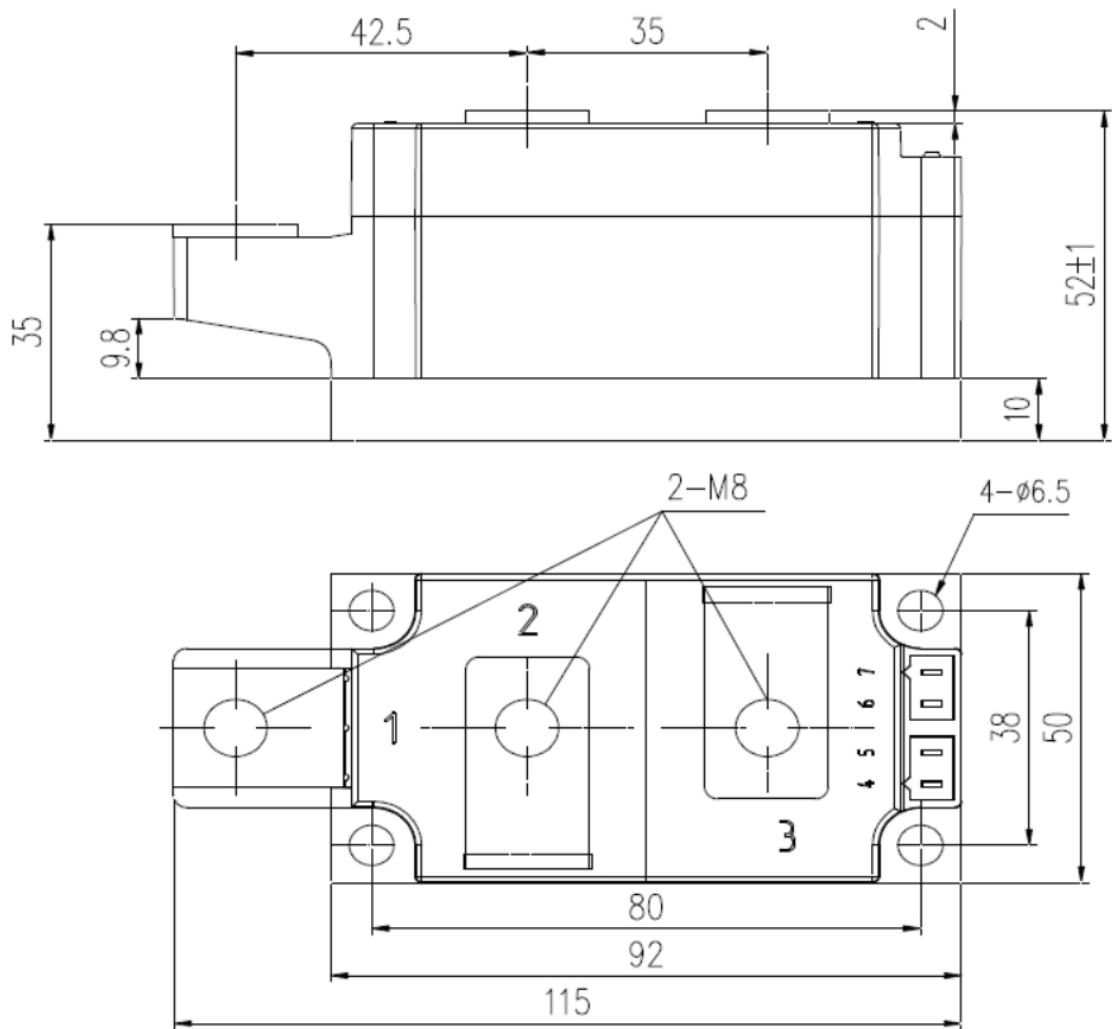
$T_C = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter/Test Conditions	Values	Unit
		EK330M95-160UA	
V_{RRM}	Repetitive Peak Reverse Voltage	1600	V
V_{DRM}	Repetitive Peak Off State Voltage	1600	
V_{RSM}	Non-Repetitive Peak Reverse Voltage	1700	

Symbol	Parameter/Test Conditions	Values	Unit
$I_{T(AV)}$	Average On State Current	Single phase, half wave, 180° conduction, $T_c = 85^\circ\text{C}$	330
$I_{T(RMS)}$	R.M.S. On State Current	Single phase, half wave, 180° conduction, $T_c = 85^\circ\text{C}$	518
I_{TSM}	Non Repetitive Surge On State Current	$t = 10\text{ms}, 50\text{HZ}, T_{jm}$	9200
I^2t	For Fusing	$V_r = 0.6V_{rrm}, T_{jm}$	KA^2S
T_J	Junction Temperature	-40 to +125	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-40 to +125	$^\circ\text{C}$
V_{ISO}	Isolation Breakdown Voltage	AC, 50Hz(R.M.S), $t=1\text{minute}$	3000
Torque	Module to Sink	Recommended (M6)	11~13
Torque	Module Electrodes	Recommended (M8)	4~6
R_{thJC}	Junction to Case Thermal Resistance	0.11	K /W
Weight		700	g

ELECTRICAL CHARACTERISTICS $T_C = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter/Test Conditions	Min.	Typ.	Max.	Unit
I_{DRM}	Maximum Peak Off-State Current $V_D = V_{DRM}, T_J = 125^\circ\text{C}$			25	mA
I_{RRM}	Maximum Peak Reverse Current $V_R = V_{RRM}, T_J = 125^\circ\text{C}$			25	
V_{TM}	Maximum on-state voltage drop $I_{TM} = 900\text{A}$			1.8	V
V_{GT}	Max. required DC gate voltage to trigger $V_A=6\text{V}, R_A=1\Omega$	2.5			V
I_{GT}	Max. required DC gate current to trigger $V_A=6\text{V}, R_A=1\Omega$	180			mA
V_{GD}	Max. required DC gate voltage not to trigger, $V_D = V_{DRM}, T_J = 125^\circ\text{C}$			0.25	V
I_{GD}	Max. required DC gate current not to trigger, $V_D = V_{DRM}, T_J = 125^\circ\text{C}$			10	mA
I_H	Maximum holding current	180			mA
I_L	Maximum latching current	400			mA
P_{GM}	Maximum peak gate power			10	W
$P_{G(AV)}$	Maximum average gate power			3	
dv/dt	Critical Rate of Rise of Off-State Voltage, $T_J=125^\circ\text{C}$, exponential to 67% rated V_{DRM}			800	V/ μs
di/dt	$V_D = 2/3V_{DRM}, I_G = 0.3\text{A}, dv/dt=0.3\text{A}/\mu\text{s}, T_J = 125^\circ\text{C}$			150	A/ μs



Dimensions in (mm)
Package Outline