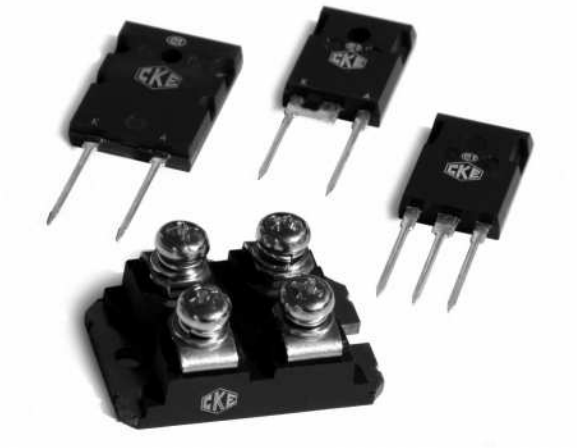
Features:

- Ultrafast recovery time
- Soft recovery characteristics
- Low recovery loss
- Low forward voltage
- High surge current capability
- Low leakage current
- RoHS Compliant

Applications:

- Switch Mode Power Supplies
- HVAC Systems
- Resistance Welding Controls
- Motor Drive Controls
- Induction Heating Equipment
- Voltage Regulators



Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Avg Forward Current I_{FAVM} @ T_C A	Case Temp T_C °C	Max Forward Voltage Drop V_F @ Rated I_F V	Max Reverse Leakage Current I_R @ V_{RRM} µA	Max Reverse Recovery Time T_{RR} nS	Thermal Resistance $R_{ø(JC)}$ °C/W	Package Style	Figure
CKF Series Fast Recovery Diodes FREDS - Epitaxial				**35 to 135nS T_{RR}**					
CKF06C8B1B	600	8	110	2.45	15	80	2.5	TO-247	1
CKF06S8B1C	600	8	110	2.45	15	80	2.5	TO-247	2
CKF06S15B1C	600	15	110	1.8	10	49	1.50	TO-247	2
CKF06S30B1C	600	30	110	2.0	15	102	0.80	TO-247	2
CKF06C30B1B	600	30	110	2.0	15	102	0.80	TO-247	1
CKF06P30D1D	600	30	85	2.0	15	102	1.04	SOT-227	7
CKF06Q30D1D	600	30	85	2.0	15	102	1.04	SOT-227	7
CKF06S60B1C	600	60	110	1.8	250	54	0.50	TO-247	2
CKF06C60B1B	600	60	110	1.8	250	85	0.50	TO-247	1
CKF06P60D1D	600	60	85	1.8	250	54	0.70	SOT-227	7
CKF06Q60D1D	600	60	85	1.8	250	54	0.70	SOT-227	7
CKF06R120D1D	600	120	85	1.8	500	103	0.33	SOT-227	7
CKF06U120D1D	600	120	85	1.8	500	103	0.33	SOT-227	7
CKF12S15B1C	1200	15	110	2.5	100	55	1.50	TO-247	2
CKF12S30B1C	1200	30	110	2.5	100	244	1.10	TO-247	2
CKF12C30B1B	1200	30	110	2.5	100	244	0.6	TO-247	1
CKF12P30D1D	1200	30	85	2.5	100	244	1.43	SOT-227	7
CKF12Q30D1D	1200	30	85	2.5	100	244	1.43	SOT-227	7
CKF12R60D1D	1200	60	80	2.5	200	258	0.70	SOT-227	7
CKF12U60D1D	1200	60	80	2.5	200	258	0.70	SOT-227	7
CKF12P100D1D	1200	100	90	3.0	50	135	0.45	SOT-227	7
CKF12Q100D1D	1200	100	90	3.0	50	135	0.45	SOT-227	7
CKF12S100D1D	1200	100	90	3.0	50	135	0.45	SOT-227	7

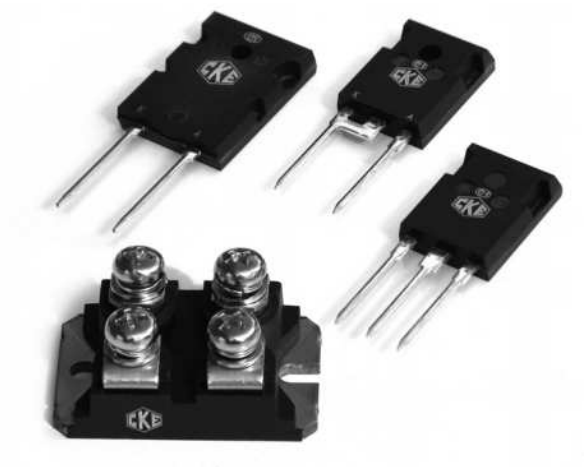
Current ratings require assembly on an appropriately engineered heat sink and use of a quality heat coupling compound.
Data for all device parameters taken at 25°C unless otherwise noted.
Additional devices available on special request. Contact the factory.

Features:

- Fast recovery time
- Low forward voltage
- High surge capability
- 150 ˚C maximum junction temperature
- RoHS compliant

Applications:

- Induction Heating Systems
- Electric Transportation
- Welding Equipment Controls
- Battery Charging Equipment
- AC/DC Motor Controls



Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Avg Forward Current I_{FAVM} @ T_C A	Case Temp T_C °C	Typical Forward Voltage Drop V_F @ Rated I_F V	Max Reverse Leakage Current I_R @ V_{RRM} µA	Reverse Recovery Time T_{RR} nS	Thermal Resistance $R_{ø(JC)}$ ˚C/W	Package Style	Figure
CKS Series High Speed Switching Diodes					**65 to 325nS T_{RR}**				
CKS06S30B1C	600	30	90	2.0	50	126	1.05	TO-247	2
CKS06C30B1B	600	30	90	2.0	50	126	1.05	TO-247	1
CKS06P30D1D	600	30	90	2.0	50	126	1.50	SOT-227	7
CKS06Q30D1D	600	30	90	2.0	50	126	1.50	SOT-227	7
CKS06H30B1B	600	30	90	2.0	50	126	1.05	TO-247	1
CKS06H30D1D	600	30	90	2.0	50	126	1.40	SOT-227	7
CKS06B30B1D	600	30	90	2.0	50	126	1.05	TO-247	3
CKS06S75D1D	600	75	77	2.0	40	264	0.65	SOT-227	7
CKS06C75B1B	600	75	100	2.0	40	264	0.50	TO-247	1
CKS06C75C1B	600	75	100	2.0	40	264	0.50	TO-264	6
CKS06P75D1D	600	75	77	2.0	40	264	0.65	SOT-227	7
CKS06Q75D1D	600	75	77	2.0	40	264	0.65	SOT-227	7
CKS06S100B1C	600	100	90	2.0	40	120	0.40	TO-247	2
CKS06S100D1D	600	100	80	2.0	27	130	0.80	SOT-227	7
CKS06P100D1D	600	100	80	2.0	27	130	0.80	SOT-227	7
CKS06Q100D1D	600	100	80	2.0	27	130	0.80	SOT-227	7
CKS12S15B1C	1200	15	100	2.7	25	65	0.85	TO-247	2
CKS12S15C1A	1200	15	90	2.5	27	65	1.50	TO-264	5
CKS12C15B1B	1200	15	90	2.5	27	65	1.50	TO-247	1
CKS12S50B1C	1200	50	100	2.2	100	636	0.48	TO-247	2
CKS12S50C1A	1200	50	100	2.2	100	636	0.48	TO-264	5
CKS12C50C1B	1200	50	100	2.2	100	636	0.48	TO-264	6
CKS12P50D1D	1200	50	85	2.2	100	636	0.63	SOT-227	7
CKS12Q50D1D	1200	50	85	2.2	100	636	0.63	SOT-227	7
CKS12R100D1D	1200	100	80	1.8	200	250	0.43	SOT-227	7
CKS12U100D1D	1200	100	80	1.8	200	250	0.43	SOT-227	7

Current ratings require assembly on an appropriately engineered heat sink and use of a quality heat coupling compound.
Data for all device parameters taken at 25°C unless otherwise noted.
Additional devices available on special request. Contact the factory.

Features:

- High surge capability
- High peak reverse voltage
- Low forward voltage
- 150 ˚C maximum junction temperature
- RoHS compliant

Applications:

- High Intensity lighting controls
- Medical Laser Equipment
- High Speed Motor Controls
- Electric Material Handling Equipment
- Transmitter Power Supplies

Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Avg Forward Current I_{FAVM} @ T_C A	Case Temp T_C °C	Typical Forward Voltage Drop V_F @ Rated I_F V	Max Reverse Leakage Current I_R @ V_{RRM} mA	Reverse Recovery Time T_{RR} nS	Thermal Resistance $R_{Ø(JC)}$ ˚C/W	Package Style	Figure
CKR Series Standard Recovery Rectifiers									
CKR16S50B1C	1600	50	90	1.14	0.1	-	0.60	TO-247	2
CKR16H50D1D	1600	50	70	1.10	0.2	-	0.78	SOT-227	7
CKR16H70D1D	1600	70	100	1.10	10	-	0.33	SOT-227	7
CKR16S70B1C	1600	70	110	1.10	10	-	0.29	TO-247	2
CKR16S85D1D	1600	85	104	1.14	10	-	0.28	SOT-227	7
CKR16S100D1D	1600	100	100	1.55	10	-	0.22	SOT-227	7
CKR16U100D1D	1600	100	70	1.10	0.2	-	0.39	SOT-227	7
CKR16S110D1D	1600	110	85	1.13	10	-	0.47	SOT-227	7
CKR16P50D1D	1600	50	70	1.10	0.2	-	0.78	SOT-227	7
CKR16Q50D1D	1600	50	70	1.10	0.2	-	0.78	SOT-227	7
CKR16B50D1D	1600	50	90	1.25	0.1	-	1.70	SOT-227	7
CKR16P70D1D	1600	70	100	1.10	0.01	-	0.33	SOT-227	7
CKR16Q70D1D	1600	70	100	1.10	0.01	-	0.33	SOT-227	7

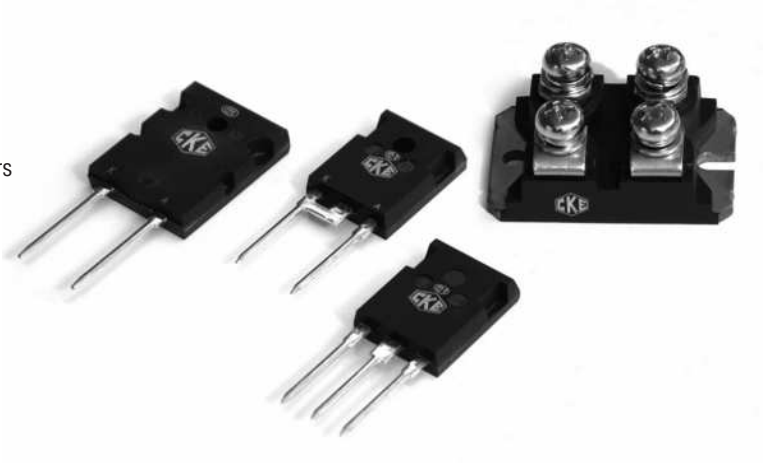
Data for all device parameters taken at 25°C unless otherwise noted.
Additional devices available on special request. Contact the factory.
A "-" indicates a component that is a standard recovery device and no T_{RR} data was taken.
Current ratings require assembly on an appropriately engineered heat sink and use of a quality heat coupling compound.

Features:

- Very high dv/dt response
- Extremely low gate charge
- High surge current capability
- High avalanche energy rating
- Excellent thermal performance
- RoHS compliant

Applications:

- Solar inverters & converters
- Welding Inverters
- Electronic Ballasts
- Induction Heating Controls
- Low Frequency Pulse Modulators
- Linear Voltage Regulators



Part Number	Drain to Source Voltage V_{DSS} V	Continuous Drain Current I_D @ T_C A	Case Temp T_C °C	On Resistance $R_{DS(ON)}$ Ω	Gate Charge Q_G nC	Reverse Recovery Time T_{RR} nS	Thermal Resistance $R_{Ø(JC)}$ °C/W	Package Style	Figure
CKM Series Power MosFETs									
CKM06D39D1D	600	39	25	0.060	252	482	0.44	SOT-227	7
CKM06P56D1D	600	56	25	0.050	120	585	0.33	SOT-227	7
CKM06D62B1B	600	62	25	0.050	120	585	0.25	TO-247	1
CKM06P78D1D	600	78	25	0.035	504	482	0.22	SOT-227	7
CKM08D15E1D	800	15	25	0.290	77	484	0.72	SOT-227	7
CKM08P30D1D	800	30	25	0.145	176	550	0.36	SOT-227	7
CKM08D34B1B	800	34	25	0.145	176	550	0.28	TO-247	1
CKM08P60D1D	800	60	25	0.073	352	550	0.18	SOT-227	7
CKM09D31D1D	900	31	25	0.120	270	920	0.39	SOT-227	7
CKM09P62D1D	900	62	25	0.600	540	920	0.20	SOT-227	7
CKM09D72C1B	900	72	25	0.060	540	920	0.15	TO-264	6

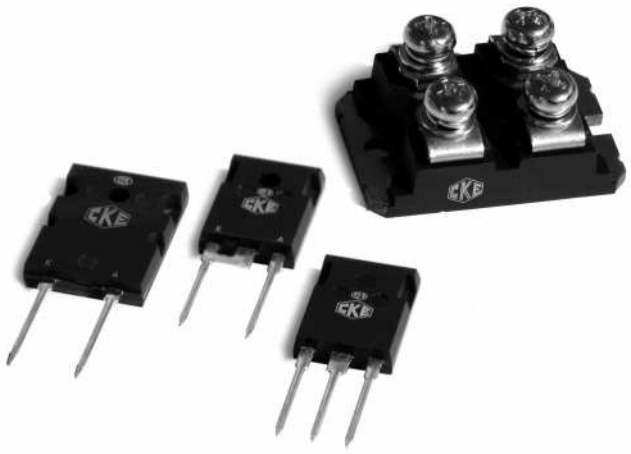
Current ratings require assembly on an appropriately engineered heat sink and use of a quality heat coupling compound.
Data for all device parameters taken at 25°C unless otherwise noted.
Additional devices available on special request. Contact the factory.
Pulse width limited by maximum junction temperature.

Features:

- Rugged high reliability design
- Low switching transients & noise
- Low power loss
- Excellent thermal performance
- RoHS compliant

Applications:

- Solar inverters & converters
- Microwave Oven Power Supplies
- Switching Power Supplies
- Linear Voltage Regulators
- Low Frequency Pulse Modulators



Part Number	Collector/Emitter Voltage V_{CES} V	DC Collector Current I_C @ T_C A	Case Temp T_C °C	Collector/Emitter Saturation Voltage $V_{CE(SAT)}$ V	Total Switching Energy E_{TS} mJ	Parameters at I_C Inductive Load @ V_{CC} V	@ R_G Ω	Thermal Resistance $R_{ø(JC)}$ °C/W	Package Style	Figure
CKT Series Discrete IGBTs										
CKT06N75B1B	600	75	100	2.0	5.60	400	6	0.35	TO-247	1
CKT06F75B1B	600	75	100	2.0	5.60	300	6	0.35	TO-247	1
CKT06N75D1D	600	75	100	2.0	4.50	400	5	0.46	SOT-227	7
CKT06F75D1D	600	75	80	2.0	4.50	400	5	0.46	SOT-227	7
CKT06P75D1D	600	75	80	2.0	4.50	400	2.5	0.46	SOT-227	7
CKT06N100D1D	600	100	80	1.9	8.55	300	24	0.45	SOT-227	7
CKT06F100D1D	600	100	80	1.9	10.85	300	24	0.45	SOT-227	7
CKT12H8B1E	1200	7.9	100	3.6	1.00	800	47	1.25	TO-247	4
CKT12N8B1B	1200	7.9	100	3.6	1.70	800	47	1.25	TO-247	1
CKT12N20B1B	1200	20	100	2.3	3.20	600	10	0.77	TO-247	1
CKT12F20B1B	1200	20	100	2.3	3.20	600	10	0.77	TO-247	1
CKT12N57C1B	1200	57	100	2.0	9.70	600	18	0.33	TO-264	6
CKT12F57C1B	1200	57	100	2.0	19.00	600	18.2	0.33	TO-264	6
CKT12N75B1B	1200	75	100	1.8	13.80	600	15	0.26	TO-247	1
CKT12N75C1B	1200	75	100	1.8	13.80	600	15	0.26	TO-264	6
CKT12N75D1D	1200	75	80	1.8	13.80	600	15	0.22	SOT-227	7
CKT12F75D1D	1200	75	80	2.3	13.80	600	15	0.22	SOT-227	7
CKT12F75C1B	1200	75	100	1.8	13.80	600	15	0.26	TO-264	6
CKT12N150D1D	1200	150	80	1.9	21.00	600	6.8	0.14	SOT-227	7
CKT12F150D1D	1200	150	80	1.9	21.00	600	6.8	0.14	SOT-227	7

Current ratings require assembly on an appropriately engineered heat sink and use of a quality heat coupling compound.
Data for all device parameters taken at 25°C unless otherwise noted.
Additional devices available on special request. Contact the factory.

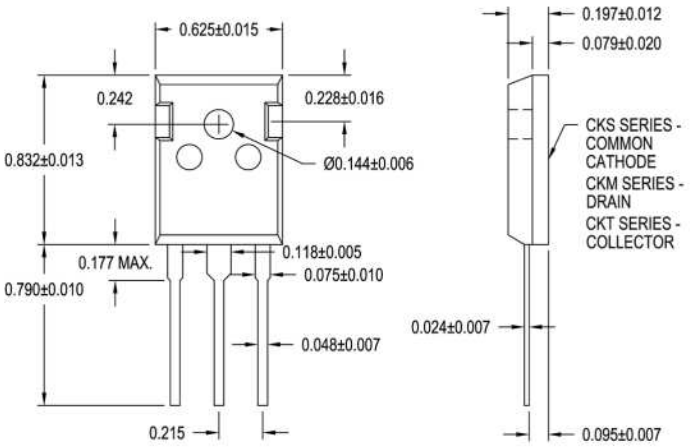


FIG 1 TO247 - B1B PACKAGE

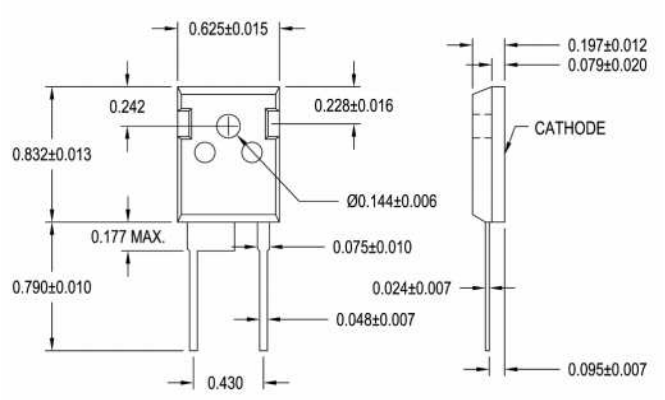


FIG 2 TO247 - B1C PACKAGE

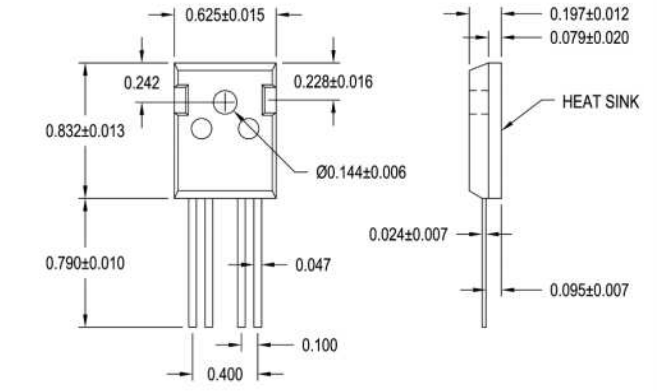


FIG 3 TO247 - B1D PACKAGE

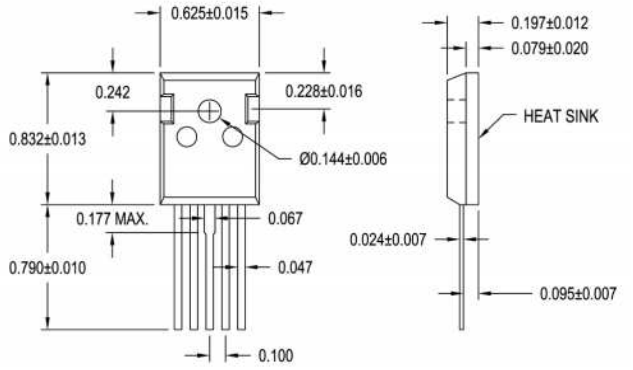


FIG 4 TO247 - B1E PACKAGE

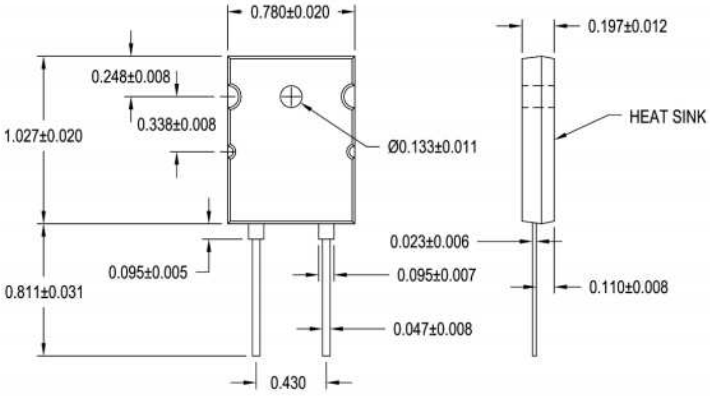


FIG 5 TO264 - C1A PACKAGE

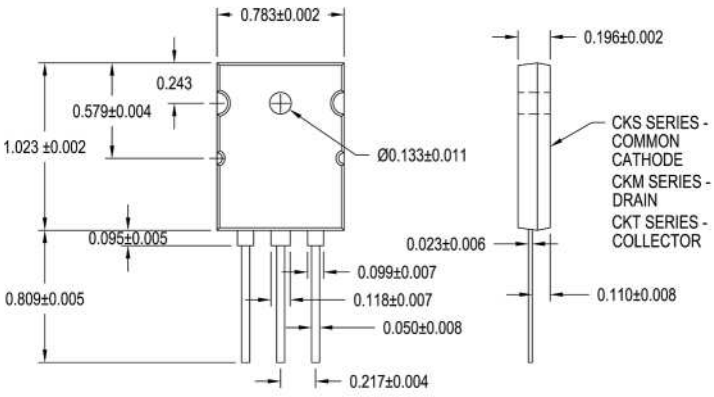


FIG 6 TO264 - C1B PACKAGE

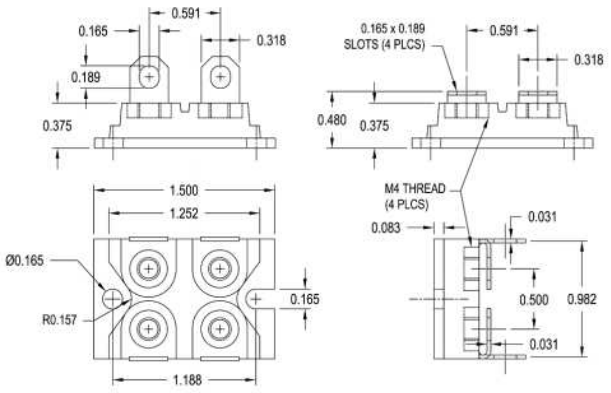


FIG 7 SOT227

E1D PACKAGE D1D PACKAGE

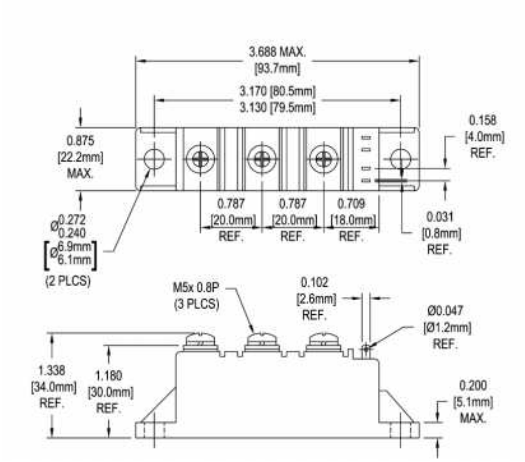


FIG 8

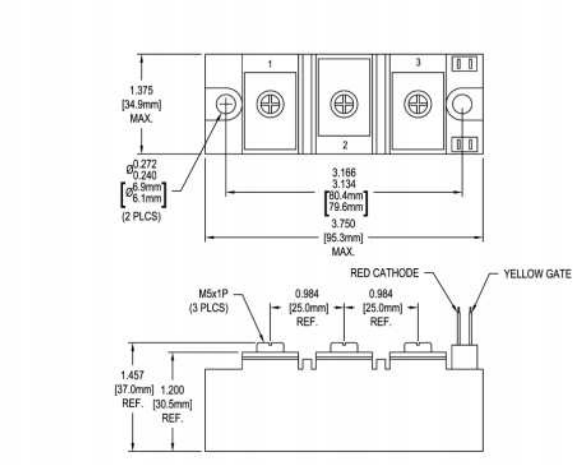


FIG 9

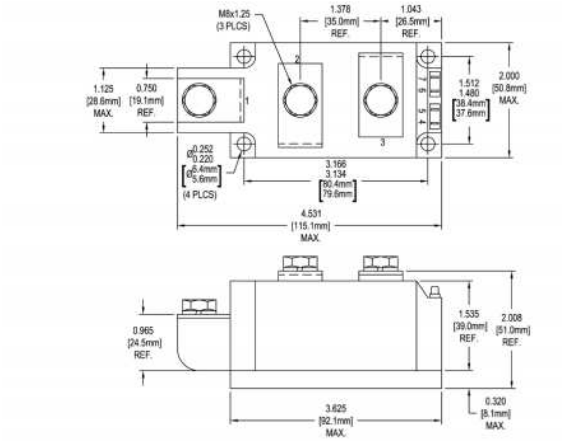


FIG 10

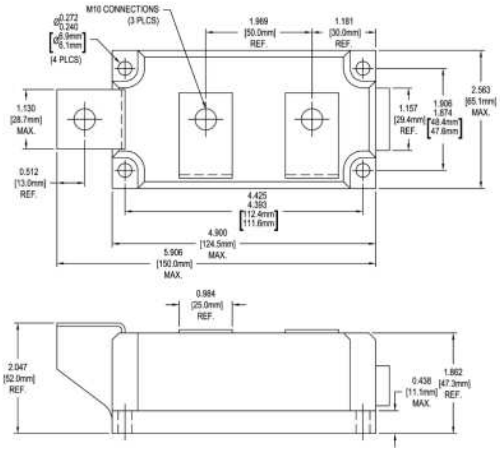


FIG 11

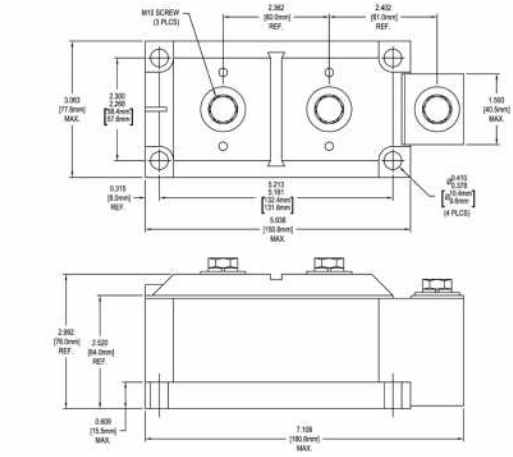


FIG 12