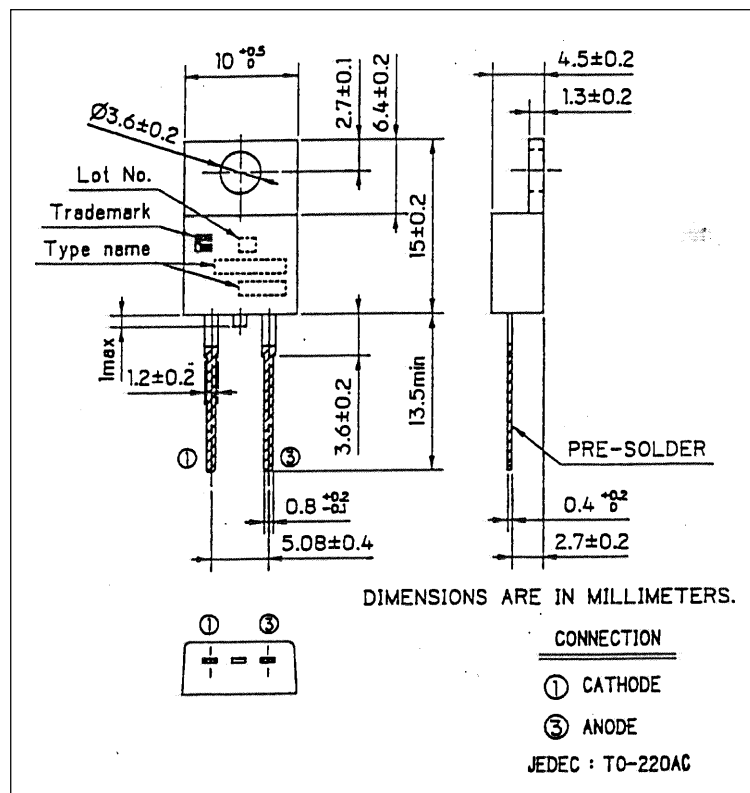
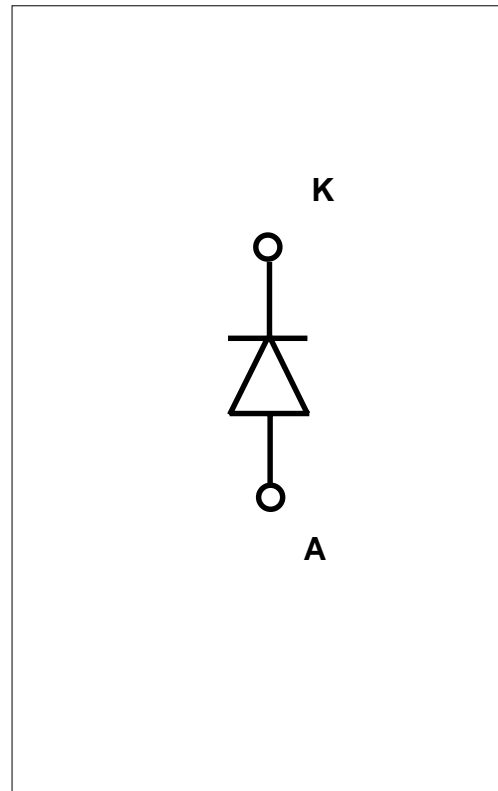


## Fast Recovery Diode for IGBT

### Outline Drawings Units mm



### Equivalent circuit



### Maximum ratings and characteristics

#### Absolute maximum ratings (Tc=25°C)

Item	Symbol	Test Conditions	Ratings	Units	
Repetitive Reverse Voltage	V <sub>RRM</sub>		600	V	
Repetitive peak surge current	I <sub>FM</sub>	20kHz Duty 50% Squ. wave	T <sub>c</sub> =81°C	30	A
			T <sub>c</sub> =25°C	46	A
Average rectified forward current	I <sub>F(A)</sub>	DC	28	A	
Non-repetitive peak surge current	I <sub>FSM</sub>	Pulse 10ms, sin. wave	110	A	
Maximum Power Dissipation	P <sub>o</sub>		70	W	
Operating Temperature	T <sub>j</sub>		+150	°C	
Storage Temperature	T <sub>stg</sub>		-40 to +150	°C	
Mounting Screw Torque			50	N-cm	

#### Electrical characteristics (at Tc=25°C unless otherwise specified)

Item	Symbol	Test Conditions	Max	Units
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 600V	1.0	mA
Forward voltage	V <sub>FM</sub>	I <sub>F</sub> = 30A	3.0	V
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> = 30A, V <sub>R</sub> =200V, di/dt=100A/μs	0.3	μs

#### Thermal resistance characteristics

Item	Symbol	Test Conditions	Max	Units
Thermal resistance	R <sub>th(j-c)</sub>	junction to case	1.78	°C/W

Characteristics

