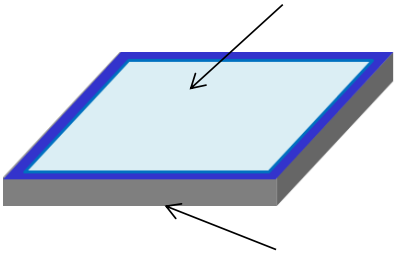
YJ Planar Fast Recovery Diode Die Specification

600V 40A, Fast recovery diode die based on silicon planar process
Part No.: FRD40A600AS-290A

Main Products Characterstics





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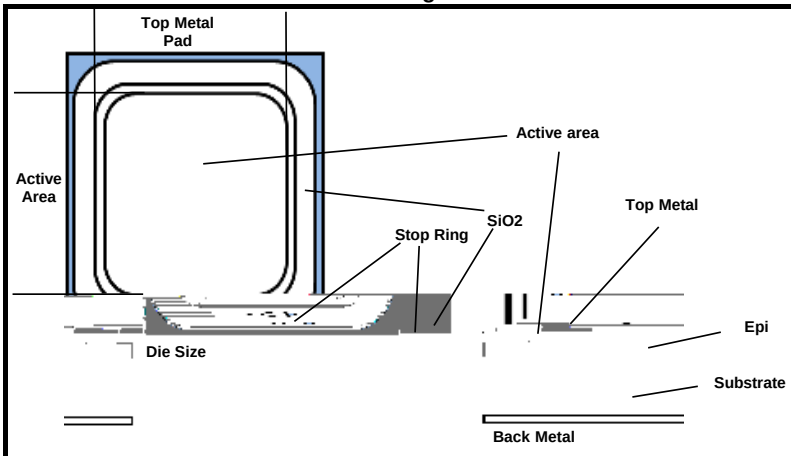
Maximum Ratings

Parameter	Symbol	Rating
Repetitive peak reverse voltage	V_{RRM}	600V
Average forward current	$I_{F(AV)}$	40A
(tp = 10 ms, halfwave, 1 cycle)	I_{FSM}	300A
Storage temperature range	T_{stg}	-40 to +150 °C
Maximum operating junction temperature	T_j	150 °C

Static Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Value	
		Spec	Typical
Reverse breakdown voltage I_R = 50uA	V_{BR}	630V	680V
Maximum forward voltage drop I_F 2%	V_F	1.45V	1.15V
Reverse Recovery Time I_F=0.5A, I_R=1A, I_{rr}=0.25A	Trr	75ns	50ns
Maximum reverse current $V_R = V_{RRM}$ 2%	I_R	2uA	0.05uA

Device Schematics and Outline Drawing



Die Thickness	290um
Die Size *	4600umX4600um
Top Metal Pad	3872umX3872um
Active Area	3802umX3802um
Top Metal	Al
Back Metal	Ag

Note: 1 *: Cutting street width is around 40um

Important Notice

Specification apply to die only. Actual performance may degrade when assembled. *Yangjie Electronics* does not guarantee device performance after assembly. All operating parameters must be validated for each customer application by customer's technical experts. Data sheet information is subjected to change without notice.	Recommended Storage Environment: Store in original container, in dessicated nitrogen, with no contamination. Shelf life for parts stored in above condition is 2 years. If the storage is done in normal atmosphere shelf life is reduced to 6 months.