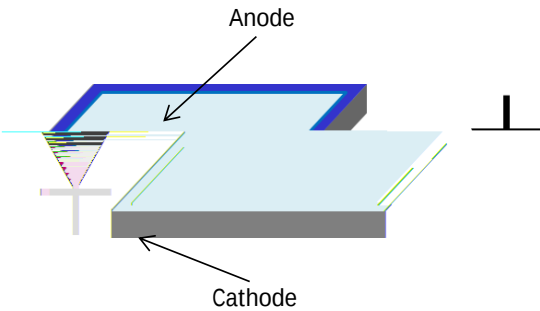


YJ Planar Fast Recovery Diode Die Specification

500V 75A, Fast recovery diode die based on silicon planar process
Part No.: FRD75A500AS-290A

Main Products Characteristics



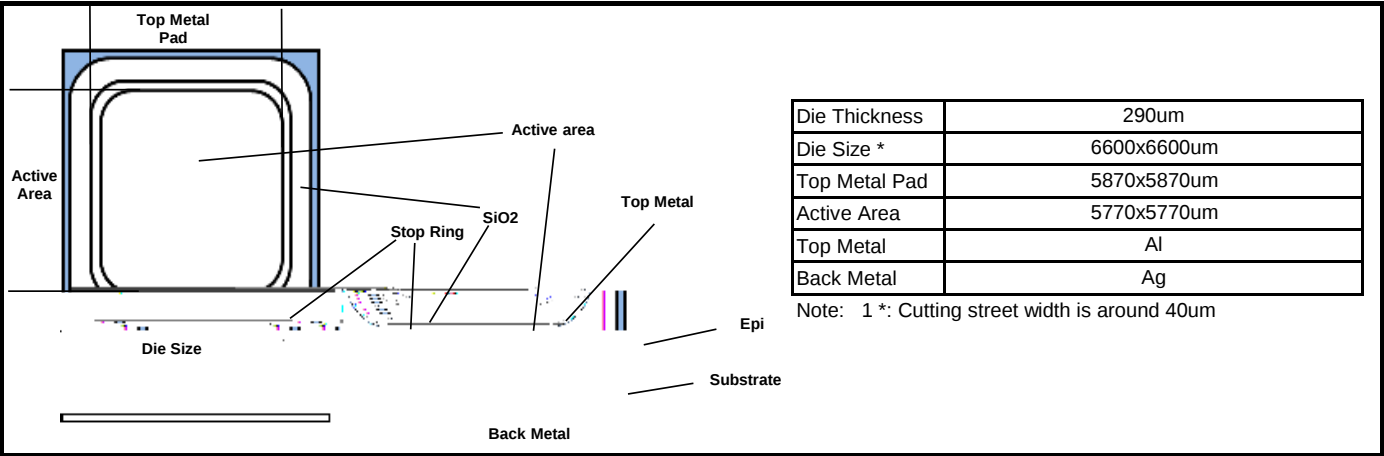
Maximum Ratings

Parameter	Symbol	Rating
Repetitive peak reverse voltage	V_{RRM}	400V
Average forward current	$I_{F(AV)}$	75A
($t_p = 8.3\text{ ms}$, halfwave, 1 cycle)	I_{FSM}	700A
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 $I_R = 50\mu\text{A}$	V_{BR}	480V	500V
Maximum forward voltage drop $I_F \leq 2\%$	V_F	1.0V	0.95V
Reverse Recovery Time $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$	T_{rr}	75ns	65ns
Maximum reverse current $V_R = V_{RRM}$ $\leq 2\%$	I_R	2uA	0.05uA

Device Schematics and Outline Drawing



Important Notice

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