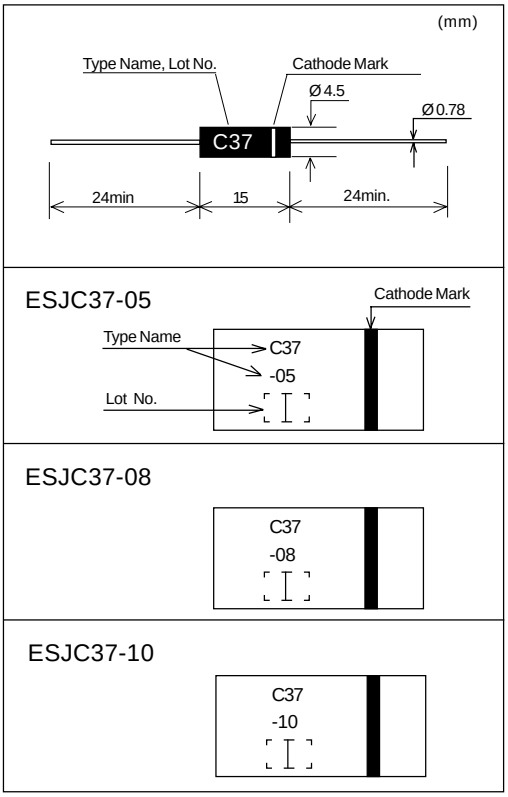
ESJC37 (5kV/540mA,8kV/410mA,10kV/310mA)

HIGH VOLTAGE DIODE

ESJC37 is high reliability resin molded type high voltage diode in small size package which is sealed (a multilayed mesa type silicon chip) by epoxy resin.

■ Outline Drawings



■ Features

- Low V_F
- High surge proof resistivity
- High reliability

■ Applications

- Rectification for microwave oven—high voltage power supply

■ Maximum Ratings and Characteristics

- Absolute Maximum Ratings

Items	Symbols	Conditions	ESJC37			Units
			-05	-08	-10	
Repetitive peak reverse voltage	V_{RRM}		5	8	10	kVpeak
Average forward current	Io	50Hz Sine half-wave average value. Toil= 25°C	540	410	310	mA
Non-repetitive peak forward current	Isurge	50Hz Sine half-wave peak value,One-shot.Ta=25°C	15	10	10	Apeak
Allowable junction temperature	T_j		120			°C
Storage temperature range	Tstg		-40 to +120			°C
Case temperature	Tc		110			°C

- Electrical Characteristics (Ta=25°C Unless otherwise specified)

Items	Symbols	Conditions	ESJC37			Units
			-05	-08	-10	
Maximum forward voltage drop	V_F	I_F=1A	13	20	25	V
Maximum reverse current	I_{R1}	V_R=5kV(-05), 8kV(-08) 10kV(-10) Ta=25°C	2			μA
	I_{R2}	V_R=5kV(-05), 8kV(-08) 10kV(-10) Ta=100°C	10			μA
Reverse recovery time	trr	I_F=0.1A I_R=0.1A 90%	0.3			μs
Minimum avalanche breakdown voltage	Vz	Iz=100μA	5.2	8.4	10.5	kV

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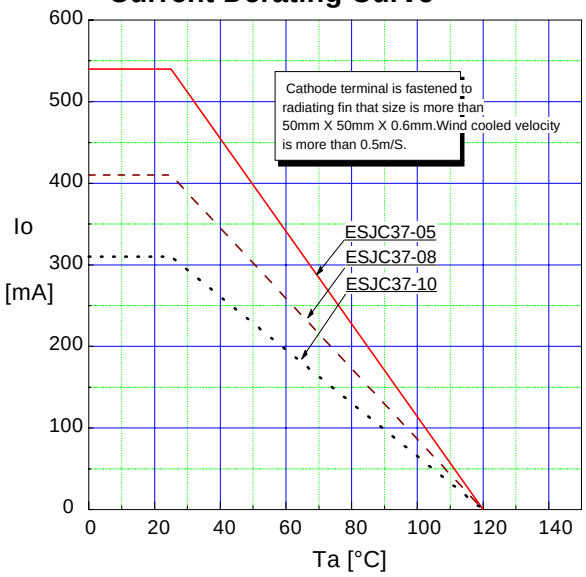
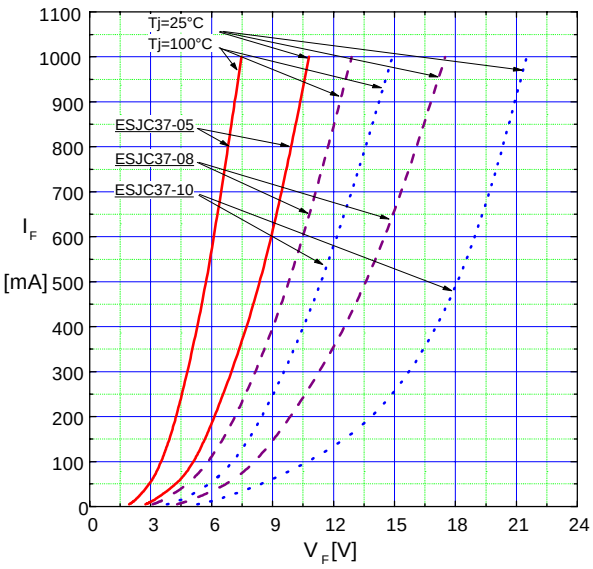
■ Characteristics

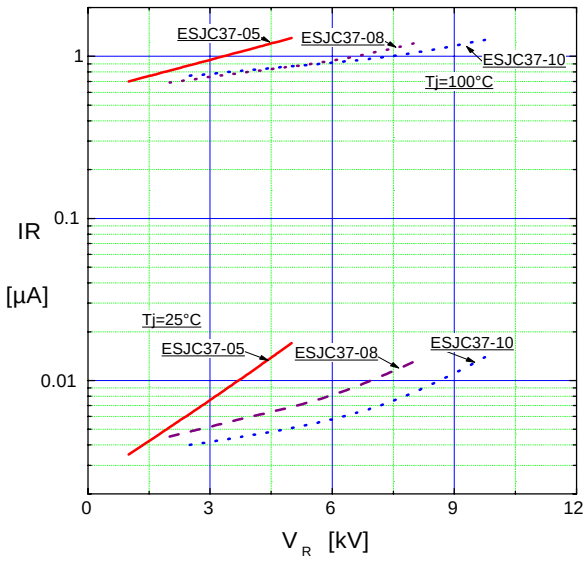
Current Derating Curve



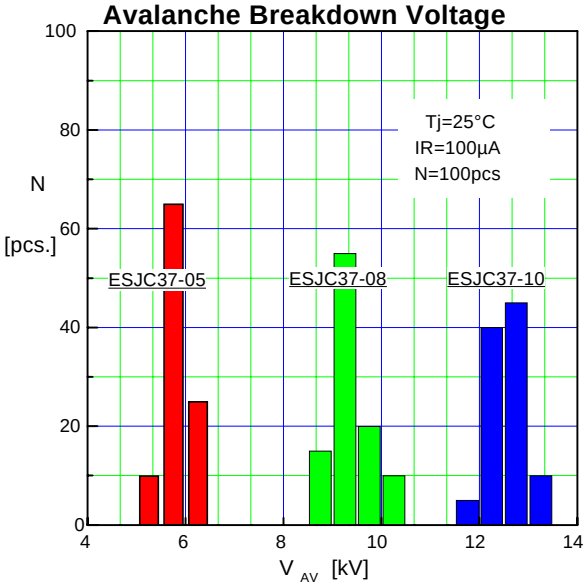
Forward Characteristics



Reverse Characteristics



Avalanche Breakdown Voltage



Reverse Recovery Time