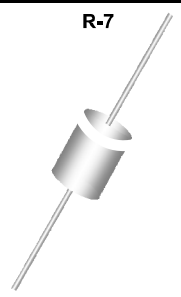
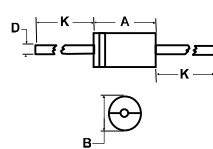


SPAL1210	Silicon Rectifier Diodes R-7 Package	Silicon Rectifier Diodes 12 Amperes 1000 Volts																														
Features <ul style="list-style-type: none">• Low forward voltage drop.• High current capability• High surge capability• High reliability• Ideal for solar panel PV application such as By-Pass diode		 <p>R-7</p> <p>COLOR BAND DENOTES CATHODE</p>																														
Mechanical Data <ul style="list-style-type: none">• Cases: R-7 Axial-Leaded, Molded Plastic• Plastic package has Underwriters Laboratory Flammability Classification 94V-0• Terminals : All Terminal Leads are Readily Solderable• Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds• Weight : 2.10 grams		 <table><tr><th>DIM</th><th colspan="2">INCHES</th><th colspan="2">MILLIMETERS</th></tr><tr><td></td><td>MIN</td><td>MAX</td><td>MIN</td><td>MAX</td></tr><tr><td>A</td><td>0.291</td><td>0.299</td><td>7.40</td><td>7.60</td></tr><tr><td>B</td><td>0.311</td><td>0.319</td><td>7.90</td><td>8.10</td></tr><tr><td>D</td><td>0.059</td><td>0.063</td><td>1.50</td><td>1.60</td></tr><tr><td>K</td><td>1.000</td><td>—</td><td>25.40</td><td>—</td></tr></table>	DIM	INCHES		MILLIMETERS			MIN	MAX	MIN	MAX	A	0.291	0.299	7.40	7.60	B	0.311	0.319	7.90	8.10	D	0.059	0.063	1.50	1.60	K	1.000	—	25.40	—
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Maximum Ratings and Electrical Characteristics (Ta = 25°C unless otherwise noted)																																
Parameter	Symbols	SPAL1210	Units																													
Maximum Repetitive Reverse Voltage	V _{RRM}	1000	Volts																													
Maximum RMS Voltage	V _{RMS}	700	Volts																													
Maximum DC Blocking Voltage	V _{DC}	1000	Volts																													
Maximum average forward rectified current (see Fig. 1)	I _(AV)	12.0	Amps																													
Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	I _{FSM}	450.0	Amps																													
Maximum Instantaneous Forward Voltage @ 12A (Note 1)	V _F	1	Volts																													
Leakage current-Sperrstrom	Ta = 25°C	10	uA																													
	Ta = 100°C	100																														
Typical Thermal Resistance (Note 2)	R _{θJA}	9	°C/W																													
Storage Temperature Range	T _{stg}	-65 to +175	°C																													
Operating Junction Temperature	T _J	-50 to +175	°C																													

Notes: 1. Pulse test with PW=300 usec, 1% duty cycle.

2. Leads are kept at ambient temperature at a distance of 10 mm from case.

Typical Characteristics

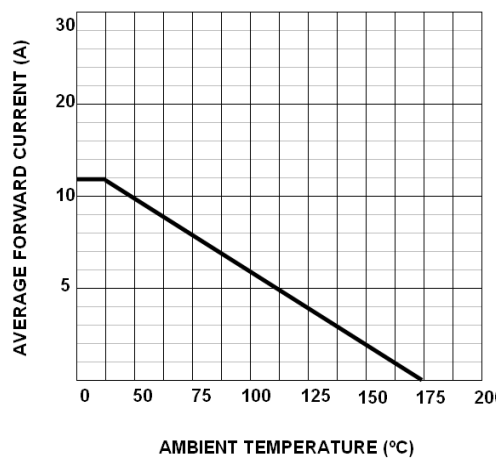


Figure 1. Forward Current Derating Curve

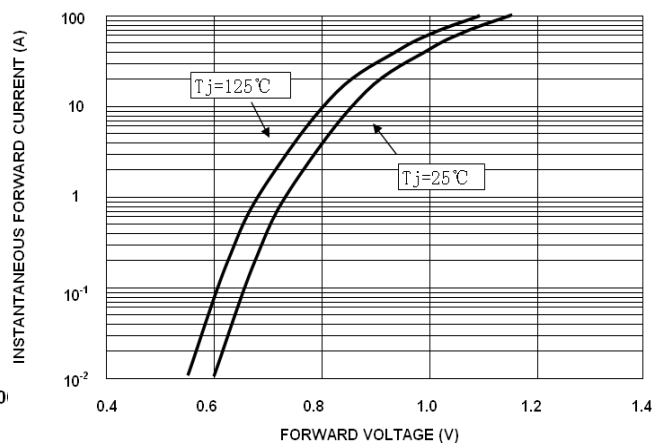


Figure 2. Forward Voltage Characteristics

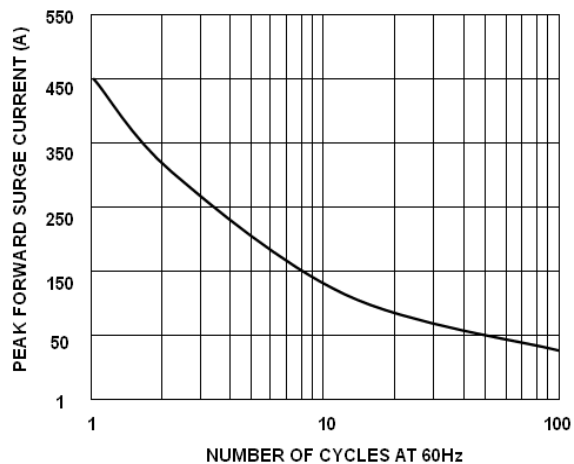


Figure 3. Non-Repetitive Surge Current



Power Semiconductor Technology

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