

## CSRS065V0-G

Working Voltage: 5Volts  
RoHS Device



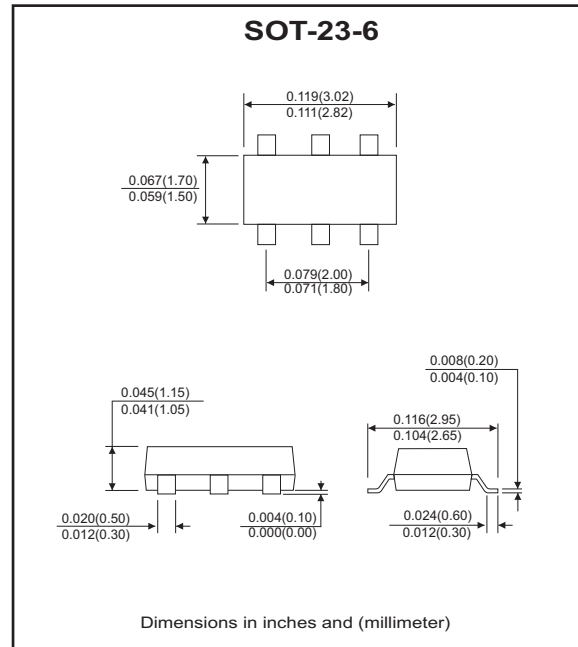
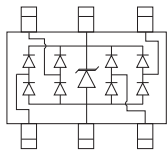
### Features

- Fast Reverse Recovery Time.
- Fast Turn on Time.
- Low Capacitance SMD Packages.

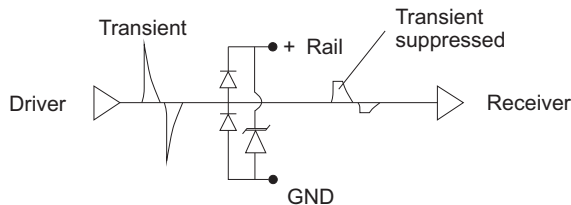
### Mechanical Data

- Case: SOT-23-6 Standard package, molded plastic.
- Terminals: Tin plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.
- Weight: 0.013 gram (approx.).

### Circuit Diagram



### Applications



### Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Operating temperature	T <sub>J</sub>	-55 to +150	°C

### Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Max.	Unit
Forward voltage	I <sub>F</sub> =50mA	V <sub>F</sub>		1.2	V
Reverse stand-off voltage		V <sub>RWM</sub>		5	V
Diode breakdown voltage	I <sub>R</sub> =1μA	V <sub>BD</sub>	6		V
Reverse leakage current	V <sub>RWM</sub> =5V	I <sub>R</sub>		5	μA
Junction capacitance	f=1MHz, V <sub>R</sub> =0V, Line to ground f=1MHz, V <sub>R</sub> =0V, Line to Line	C <sub>T</sub>		5	pF
ESD capability	IEC 61000-4-2	ESD		16	kV
Peak pulse power	T <sub>P</sub> =8/20 μS	P <sub>PP</sub>		300	W

## Rating and Characteristic Curves (CSRS065V0-G )

Fig.1 Pulse Power vs. Time

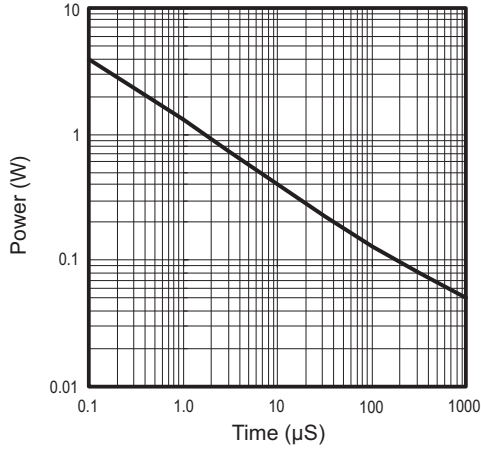


Fig.2 Power Derating

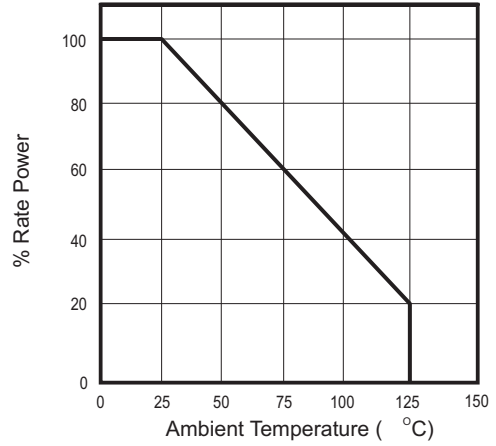


Fig. 1 - 8/20us Peak pulse current waveform acc. IEC 61000-4-5

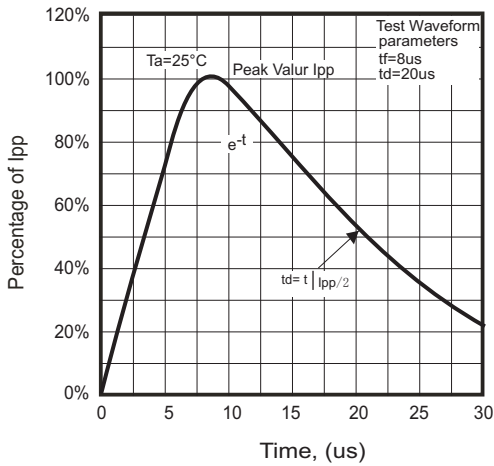


Fig.4 Clamp Voltage vs. Pulse Current

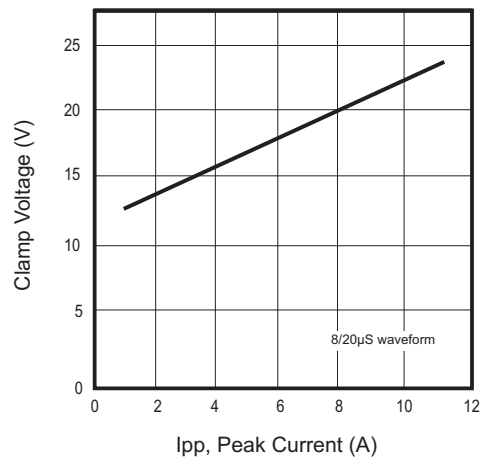


Fig.5 Forward Voltage vs. Forward Current

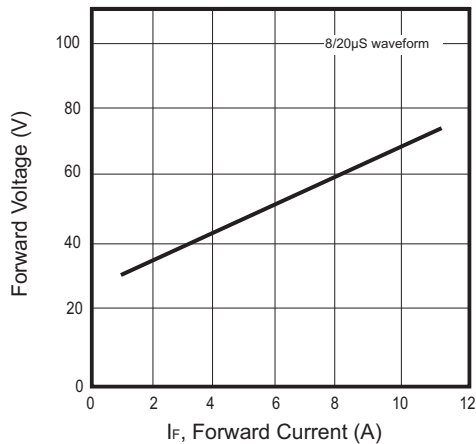
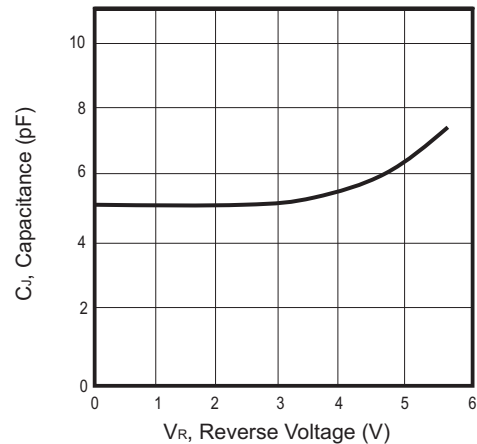
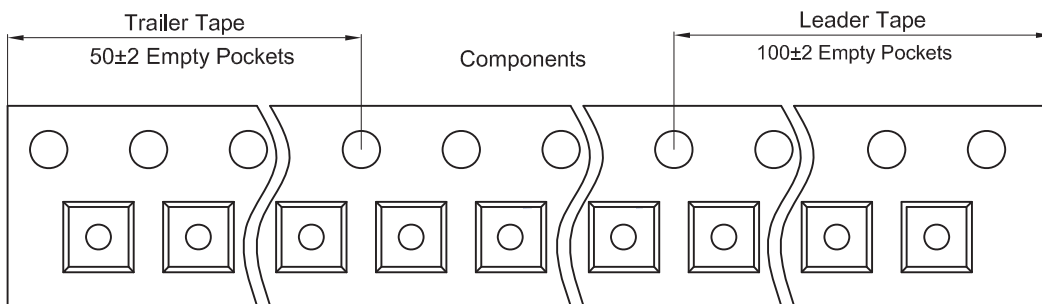
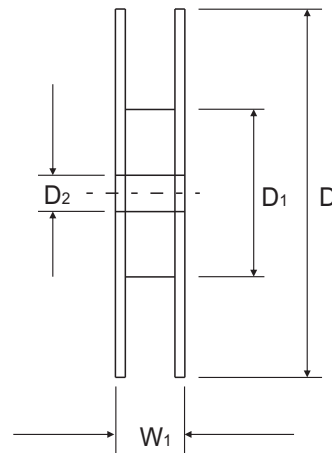
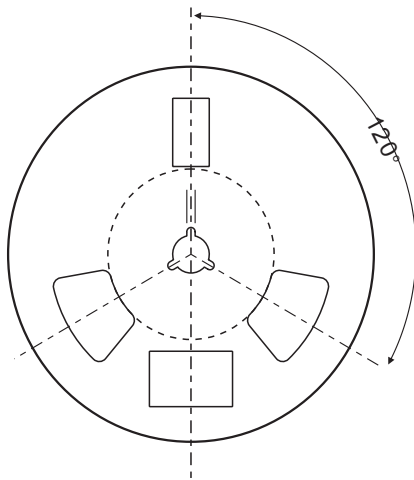
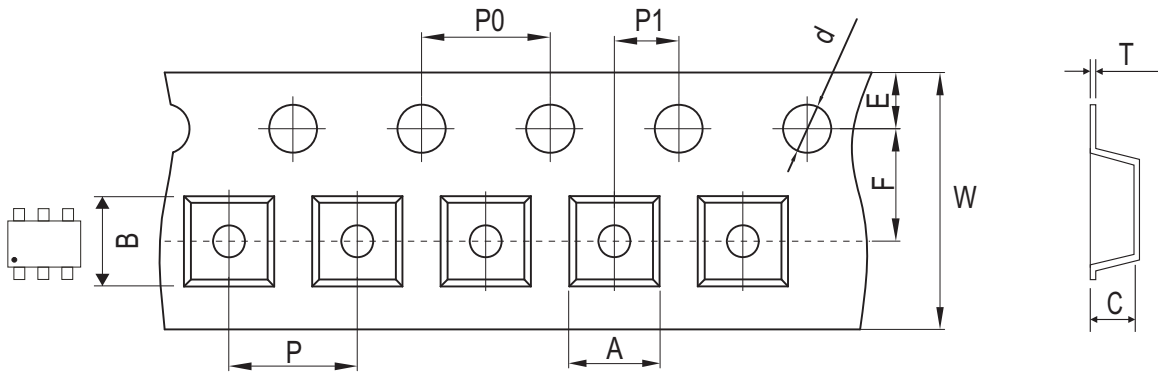


Fig.6 Capacitance vs. Reverse Voltage



## Reel Taping Specification



SOT-23-6	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.17 ± 0.10	3.23 ± 0.10	1.37 ± 0.10	1.50 ± 0.05	180.0 + 0.00 / - 0.30	60.00 ± 0.50	13.00 ± 0.20
	(inch)	0.125 ± 0.004	0.127 ± 0.004	0.054 ± 0.004	0.059 ± 0.002	7.087 + 0.00 / - 0.012	2.362 ± 0.020	0.512 ± 0.008

SOT-23-6	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 / - 0.10	12.30 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 / - 0.004	0.484 ± 0.008

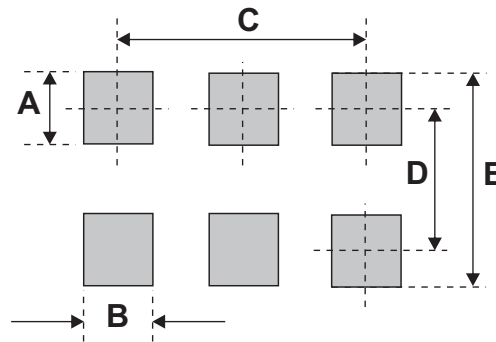
## Marking Code

Part Number	Marking Code
CSRS065V0-G	5V4



## Suggested PAD Layout

SIZE	SOT-23-6	
	(mm)	(inch)
A	1.10	0.043
B	0.60	0.024
C	0.95	0.037
D	2.50	0.098
E	3.60	0.142



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
SOT-23-6	3,000	7