CMPSH-3
CMPSH-3A
CMPSH-3C
CMPSH-3S

SURFACE MOUNT SILICON SCHOTTKY DIODES

SOT-23 CASE

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPSH-3 series devices are silicon Schottky diodes designed for surface mount fast switching applications requiring a low forward voltage drop.

The following configurations are available:

CMPSH-3	SINGLE	**MARKING CODE: D95**
CMPSH-3A	DUAL, COMMON ANODE	**MARKING CODE: DB1**
CMPSH-3C	DUAL, COMMON CATHODE	**MARKING CODE: DB2**
CMPSH-3S	DUAL, IN SERIES	**MARKING CODE: DA5**

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Continuous Forward Current	I_F	100	mA
Peak Repetitive Forward Current	I_{FRM}	350	mA
Peak Forward Surge Current, tp=10ms	I_{FSM}	750	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=25V		90	500	nA
I_R	V_R=25V, T_A=100°C		25	100	μA
BV_R	I_R=100μA	30			V
V_F	I_F=2.0mA		0.29	0.33	V
V_F	I_F=15mA		0.37	0.45	V
V_F	I_F=100mA		0.51	1.00	V
C_J	V_R=0, f=1.0MHz			20	pF
t_{rr}	I_F=I_R=10mA, I_{rr}=1.0mA, R_L=100Ω			5.0	ns

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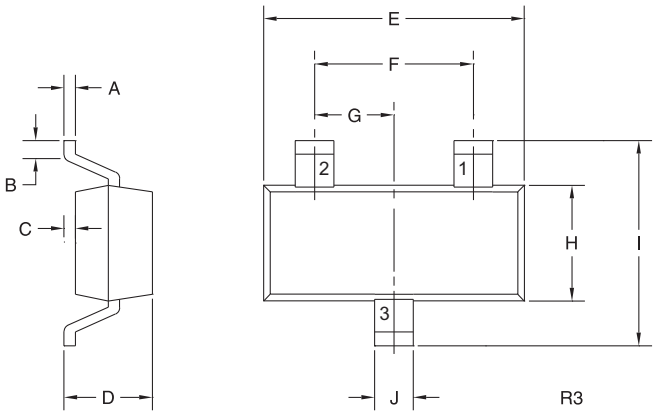
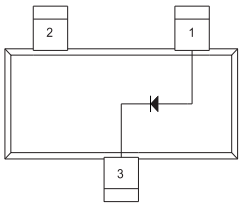
SOT-23 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

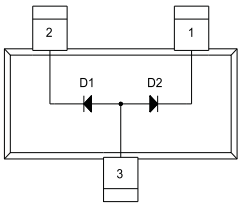
PIN CONFIGURATIONS



CMPSH-3

LEAD CODE:
1) Anode
2) No Connection
3) Cathode

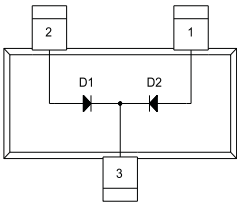
MARKING CODE: D95



CMPSH-3A

LEAD CODE:
1) Cathode D2
2) Cathode D1
3) Anode D1, D2

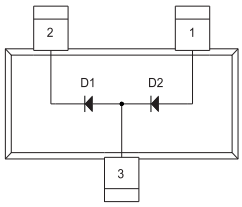
MARKING CODE: DB1



CMPSH-3C

LEAD CODE:
1) Anode D2
2) Anode D1
3) Cathode D1, D2

MARKING CODE: DB2



CMPSH-3S

LEAD CODE:
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2

MARKING CODE: DA5

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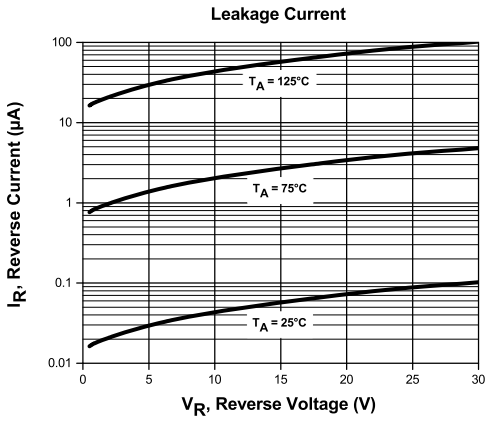
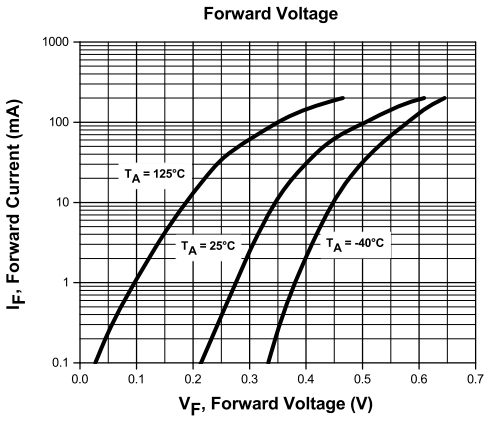
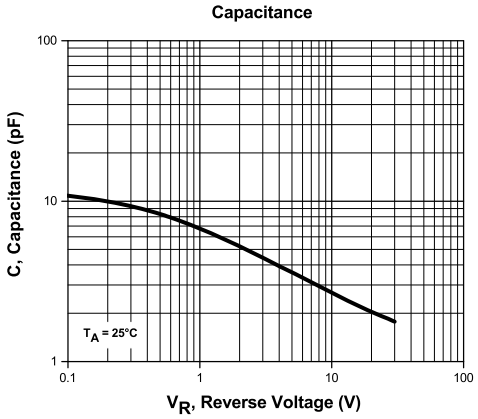
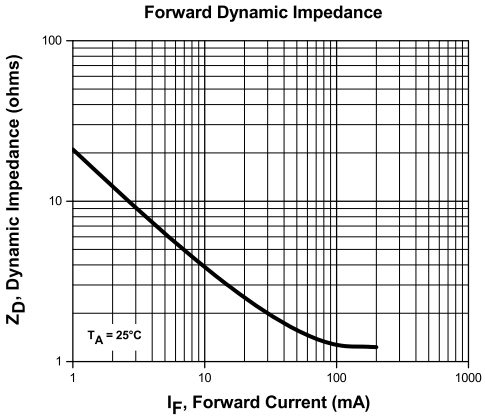
TYPICAL ELECTRICAL CHARACTERISTICS









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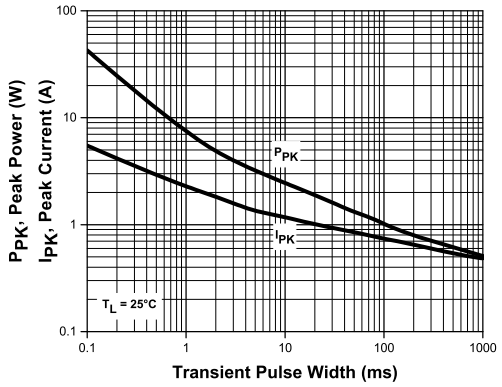
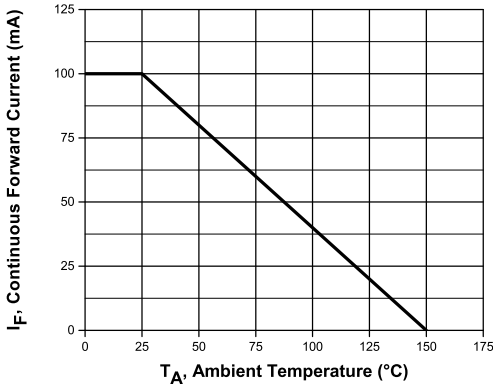
TYPICAL ELECTRICAL CHARACTERISTICS

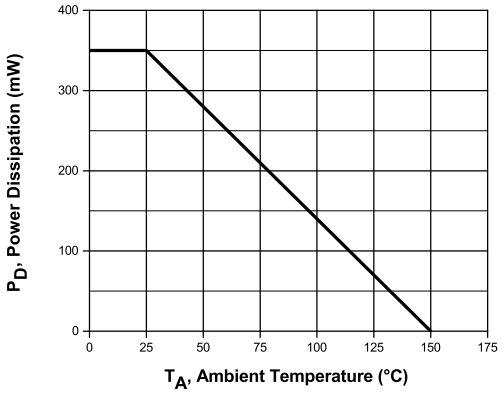
Transient Peak Power and Peak Current Capacity



Current Derating



Power Derating



OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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