



CMUD6263E
CMUD6263AE
CMUD6263CE
CMUD6263SE

**ENHANCED SPECIFICATION
SURFACE MOUNT ULTRAmi™
SILICON SCHOTTKY DIODES**

**ENHANCED
E
SPECIFICATION**

ULTRAmi™



SOT-523 CASE

Central™

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMUD6263E Series types are Enhanced High Voltage Silicon Schottky diodes, epoxy molded in an ULTRAmi™ SOT-523 surface mount package, designed for low current fast switching applications requiring a low forward voltage drop.

ENHANCED SPECIFICATIONS:

◆ $I_F = 70\text{mA}$ (from 15mA)

◆ $I_{FSM} = 100\text{mA}$ (from 50mA)

MARKING CODE:

CMUD6263E	SINGLE	C63
CMUD6263AE	DUAL, COMMON ANODE	C6A
CMUD6263CE	DUAL, COMMON CATHODE	C6C
CMUD6263SE	DUAL, IN SERIES	C6S

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	70	V
◆ Continuous Forward Current	I_F	70	mA
◆ Forward Surge Current, $t_p=1.0\text{ s}$	I_{FSM}	100	mA
Power Dissipation	P_D	250	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	500	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$)

	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
◆ I_R		$V_R=50\text{V}$		10	100	nA
	BV_R	$I_R=10\mu\text{A}$	70			V
◆◆ V_F		$I_F=100\mu\text{A}$		290	320	mV
◆◆ V_F		$I_F=500\mu\text{A}$		345	380	mV
◆ V_F		$I_F=1.0\text{mA}$		380	400	mV
◆◆ V_F		$I_F=10\text{mA}$		700	750	mV
◆◆ V_F		$I_F=15\text{mA}$		830	900	mV
	C_T	$V_R=0\text{V}, f=1.0\text{MHz}$			2.0	pF
	t_{rr}	$I_R=I_F=10\text{mA}, I_{rr}=1\text{mA}, R_L=100\Omega$			5.0	ns

◆ Enhanced specification.

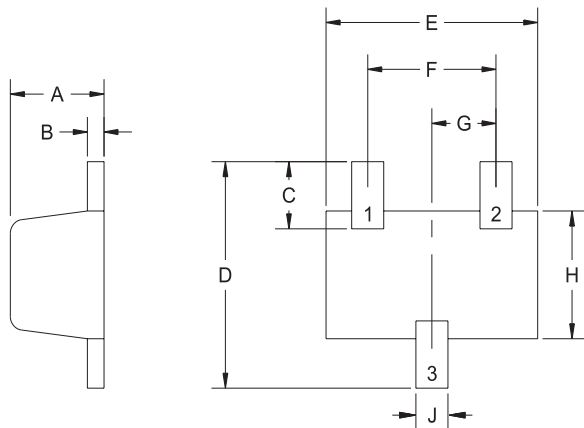
◆◆ Additional Enhanced specification.

R1 (22-March 2006)

ENHANCED SPECIFICATION
SURFACE MOUNT ULTRAmi™
SILICON SCHOTTKY DIODES

SOT-523 CASE - MECHANICAL OUTLINE

BOTTOM VIEW

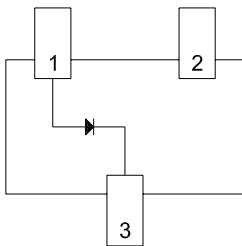


DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

SOT-523 (REV: R2)

R2

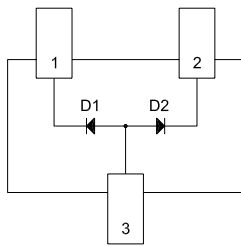
PIN CONFIGURATIONS



CMUD6263E

- 1) Anode
- 2) No Connection
- 3) Cathode

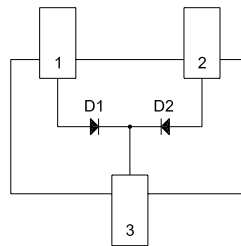
MARKING CODE:
C63



CMUD6263AE

- 1) Cathode D1
- 2) Cathode D2
- 3) Anode D1, D2

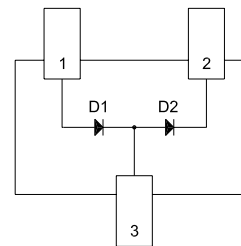
MARKING CODE:
C6A



CMUD6263CE

- 1) Anode D1
- 2) Anode D2
- 3) Cathode D1, D2

MARKING CODE:
C6C



CMUD6263SE

- 1) Anode D1
- 2) Cathode D2
- 3) Anode D2, Cathode D1

MARKING CODE:
C6S

R1 (22-March 2006)