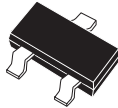


CMPD4150

**HIGH CURRENT
HIGH SPEED
SWITCHING DIODE**



SOT-23 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD4150 type is an ultra-high speed silicon switching diode manufactured by the epitaxial planar process, in an epoxy molded surface mount package, designed for high speed switching applications.

Marking code is ABA.

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

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	50	V
Peak Repetitive Reverse Voltage	V_{RRM}	50	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Forward Surge Current, $t_p=1\ \mu\text{sec.}$	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1\ \text{sec.}$	I_{FSM}	1000	mA
Power Dissipation	P_D	350	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	θ_{JA}	357	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=50\text{V}$		100	nA
V_F	$I_F=1.0\text{mA}$	0.54	0.62	V
V_F	$I_F=10\text{mA}$	0.66	0.74	V
V_F	$I_F=50\text{mA}$	0.76	0.86	V
V_F	$I_F=100\text{mA}$	0.82	0.92	V
V_F	$I_F=200\text{mA}$	0.87	1.0	V
C_T	$V_R=0$, $f=1\ \text{MHz}$		4.0	pF
t_{rr}	$I_R=I_F=10\text{mA}$, $R_L=100\Omega$, Rec. to 1.0mA		4.0	ns

All dimensions in inches (mm).

