CHENMKO ENTERPRISE CO.,LTD

BD4148N1APT

SURFACE MOUNT
SWITCHING DIODE
VOLTAGE 75 Volts CURRENT 0.15 Ampere

Lead free devices

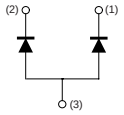
APPLICATION
* Ultra high speed switching

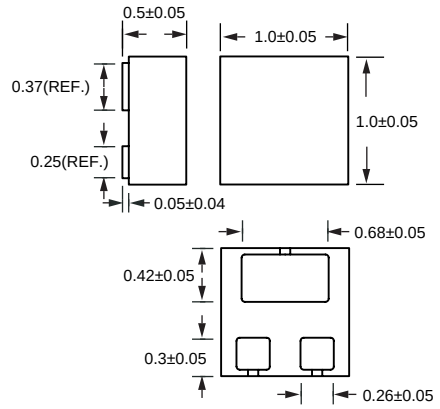
FEATURE
* SmaBD surface mounting type. (FBPT-923)
* High speed. (T_{RR}=4.0nSec Typ.)
* Suitable for high packing density.
* Peak forward current is 500mA.

CONSTRUCTION
* Silicon epitaxial planar

FBPT-923

CIRCUIT





Dimensions in millimeters

FBPT-923

MAXIMUM RATINGES (At T_A = 25°C unless otherwise noted)

RATINGS		SYMBOL	BD4148N1APT	UNITS
Maximum Non-Repetitive Peak Reverse Voltage		V_{RM}	100	Volts
Maximum Repetitive Peak Reverse Voltage Maximum Working Peak Reverse Voltage Maximum DC Blocking Voltage		V_{RRM} V_{RWM} V_{DC}	75	Volts
Maximum RMS Voltage		V_{RMS}	53	Volts
Maximum Average Forward Rectified Current		I_O	0.15	Amps
Peak Forward Surge Current at 1uSec.	@1Sec	I_{FSM}	1.0	Amps
	@1.0uSec		2.0	
Typical Junction Capacitance between Terminal (Note 1)		C_J	4.0	pF
Maximum Reverse Recovery Time (Note 2)		trr	4.0	nSec
Maximum Thermal Resistance		$R_{\theta JA}$	350	°C/W
Maximum Operating and Storage Temperaturd Range		T_J,T_{STG}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	BD4148N1APT	UNITS
Maximum Instantaneous Forward Voltage at I_F= 10 mA		V_F	1.0	Volts
Maximum Average Reverse Current	V_R= 20V @TJ=25°C V_R= 75V @TJ=25°C V_R= 20V @TJ=150°C V_R= 70V @TJ=150°C	I_R	5.0 25 30 50	uAmps

2006-07

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.
2. Measured at applied froward current of 10 mA, reverse current of 1.0 mA, Reverse voltage of 6.0 volts and R_L= 100 ohms.
3. ESD sensitive product handling required.

RATING CHARACTERISTIC CURVES (BD4148N1APT)

FIG. 1 - FORWARD CHARACTERISTICS

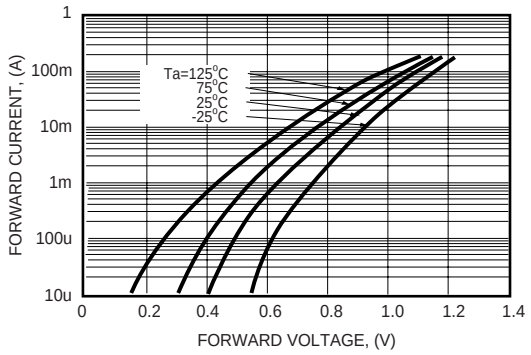


FIG. 2 - REVERSE CHARACTERISTICS

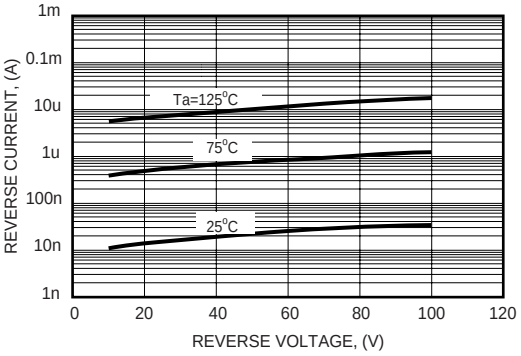


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

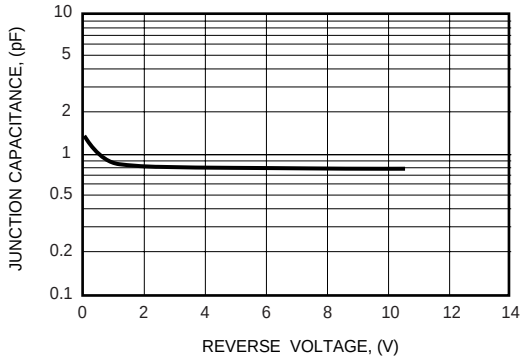


FIG. 4 - REVERSE RECOVERY TIME CHARATERISTICS

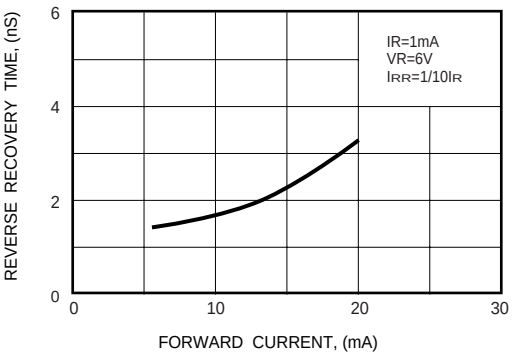


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

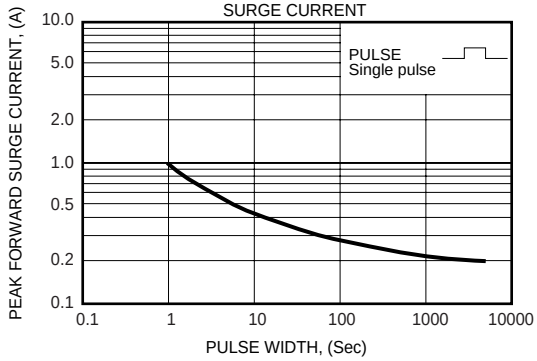


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

