

1.5A GLASS PASSIVATED RECTIFIER DIODE**APPLICATIONS**

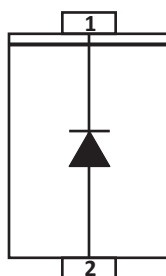
- Rectification in Power Supplies
- Freewheeling Diode For Consumer Electronics, Automotive & Telecom

FEATURES

- Glass Passivated Chip
- Low Power Loss
- Low Forward Voltage Drop
- Low Reverse Current
- Low Forward Voltage Drop
- RoHS Compliant
- REACH Compliant

MECHANICAL CHARACTERISTICS

- Molded JEDEC DO-214AC Package
- Approximate Weight: 0.06 grams
- Lead-Free Pure-Tin Plating (Annealed)
- Solder Reflow Temperature:
Pure-Tin - Sn, 100: 260-270°C
- 12mm Tape and Reel Per EIA Standard 481
- Terminal: Solderable per MIL-STD-750, Method 2026
- Flammability Rating UL 94V-0

PIN CONFIGURATION

TYPICAL DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Operating Temperature	T_A	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C
Peak Forward Surge Current, 8.3ms single half-sine wave superimposed on rated load.	I_{FSM}	50	Amps
Typical Thermal Resistance - Lead	$R_{\theta JL}$	40	°C/W
Typical Thermal Resistance - Ambient	$R_{\theta JA}$	80	°C/W

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	DEVICE MARKING	REPETITIVE PEAK REVERSE VOLTAGE V_{RRM} VOLTS	MINIMUM RMS VOLTAGE V_{RMS} VOLTS	MAXIMUM DC BLOCKING VOLTAGE V_{DC} VOLTS	MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT $I_{F(AV)}$ AMPS	MAXIMUM FORWARD VOLTAGE @1.5A V_F VOLTS	MAXIMUM REVERSE LEAKAGE CURRENT @ V_{RRM} I_R μA
PBYG10Y	BYG10Y	1600	1120	1600	1.5	1.15	1

FIGURE 1
FORWARD CURRENT DERATING CURVE

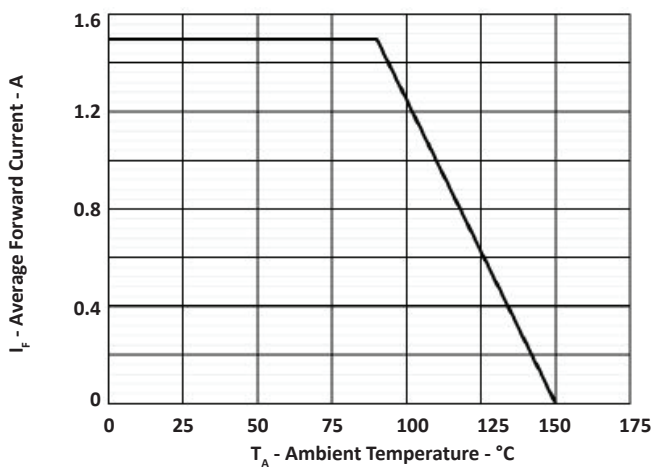
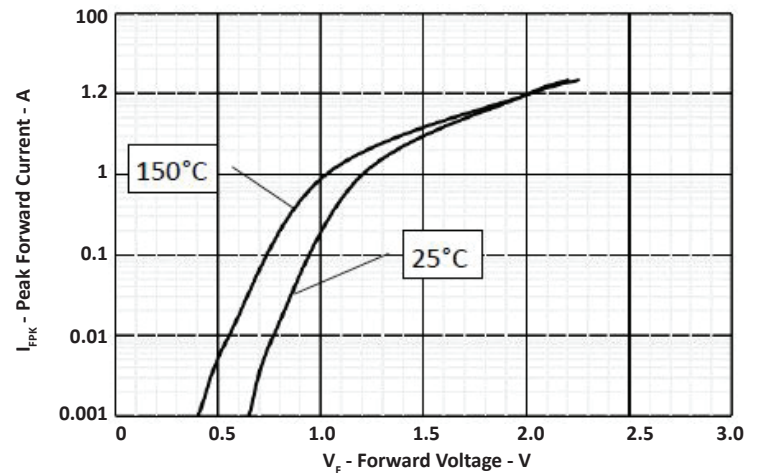
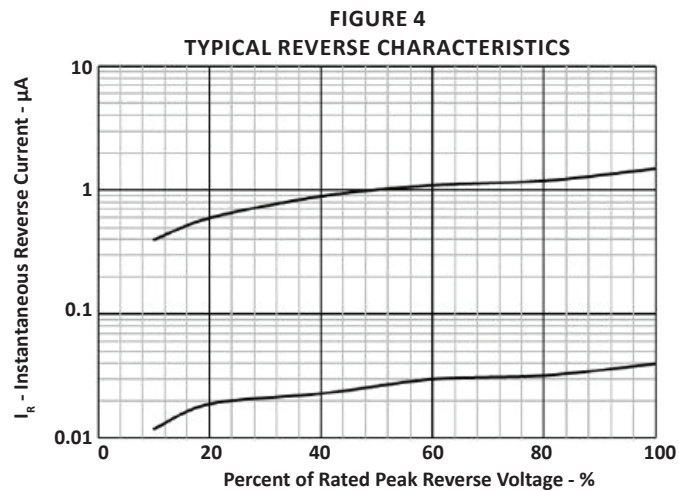
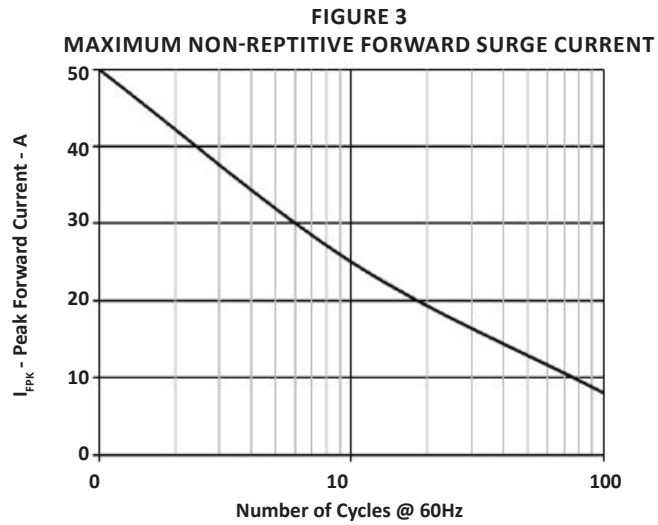


FIGURE 2
TYPICAL FORWARD CHARACTERISTICS



TYPICAL DEVICE CHARACTERISTICS

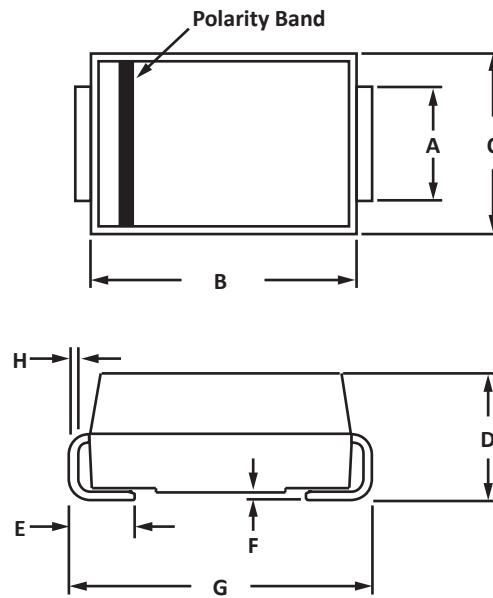
DO-214AC PACKAGE INFORMATION

OUTLINE DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.23	1.63	0.049	0.064
B	4.10	4.55	0.162	0.179
C	2.51	2.76	0.099	0.109
D	1.96	2.26	0.077	0.089
E	0.75	1.51	0.03	0.06
F	0.00	0.20	0.000	0.008
G	4.87	5.22	0.192	0.206
H	0.15	0.30	0.006	0.012

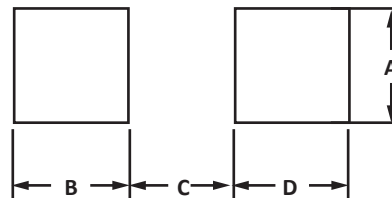
NOTES

1. Dimensions are exclusive of mold flash and metal burrs.

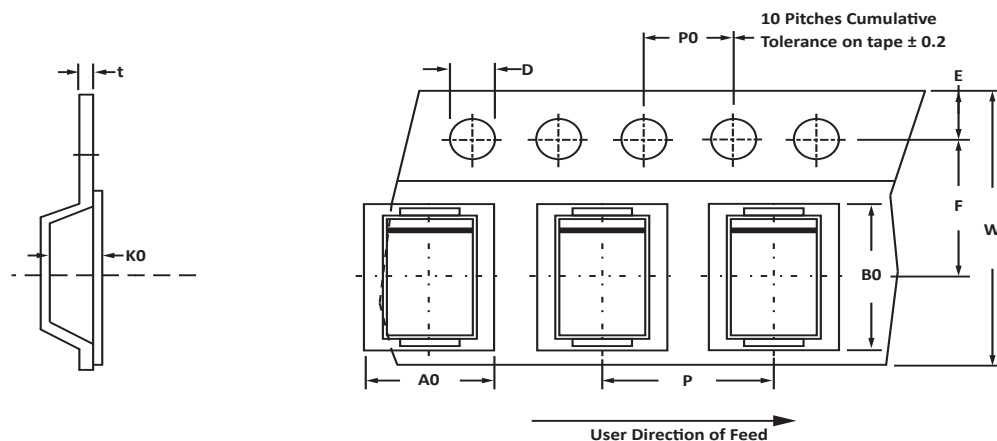


PAD LAYOUT DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.57	-	0.062	-
B	1.55	-	0.061	-
C	-	2.28	-	0.090
D	1.55	-	0.061	-



TAPE AND REEL



SPECIFICATIONS

REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P	tmax
330mm (13")	12mm	2.79 ± 0.10	5.33 ± 0.10	2.36 ± 0.10	1.55 ± 0.10	1.75 ± 0.10	5.5 ± 0.05	12.00 ± 0.30	4.00 ± 0.10	4.00 ± 0.10	0.4

NOTES

1. Dimensions are in millimeters.
2. Surface mount product is taped and reeled in accordance with EIA-481.
3. Suffix - T13 = 13" Reel - 5,000 pieces per 16mm tape.
4. Marking on Part - marking code (see page 2), date code, logo and polarity band.

ORDERING INFORMATION

BASE PART NUMBER	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
PBYG10Y	N/A	-T13	5,000	13"	N/A

This device is only available in a Lead-Free configuration.

COMPANY INFORMATION

COMPANY PROFILE

In business more than 25 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of overvoltage protection and overcurrent protection components. These include transient voltage suppressor array (TVS arrays) avalanche breakdown diode, steering diode TVS array and electronics SMD chip fuses. These components deliver circuit protection in electronic systems from numerous overvoltage and overcurrent events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices also offers LED wafer die for ESD protection and related high frequency products. ProTek Devices is ISO 9001:2015 certified.

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