

# UTC UNISONIC TECHNOLOGIES CO., LTD

1N4745A **DIODE** 

# ZENER DIODE

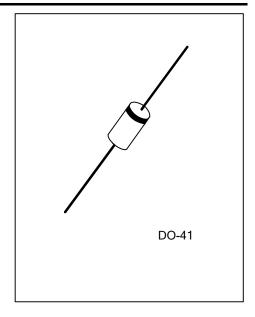
#### DESCRIPTION

The UTC 1N4745A is a zener diode, it uses UTC's advanced technology to provide customers with low inductance and low reverse leakage, etc.

The UTC 1N4745A is suitable for use in stabilizing and clipping with high power rating.

#### **FEATURES**

- \* Low reverse leakage
- \* Low inductance
- \* Glass passivated chip



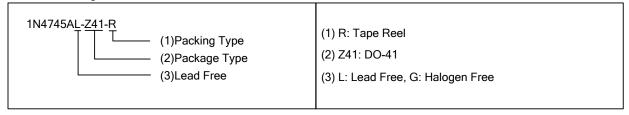
#### **SYMBOL**



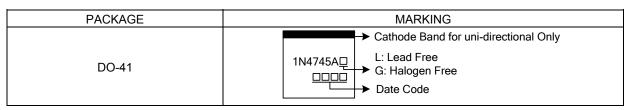
#### **ORDERING INFORMATION**

Ordering	Daakana	Pin Ass	Deakins			
Lead Free	Halogen Free	Package	1	2	Packing	
1N4745AL-Z41-R	1N4745AG-Z41-R	DO-41	K	Α	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode



#### MARKING INFORMATION



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## ■ **ABSOLUTE MAXIMUM RATINGS** (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	UNIT
Forward Voltage at I <sub>F</sub> =200mA	$V_{F}$	1.2	V
DC Power Dissipation at T <sub>L</sub> =50°C (Note 2)	$P_{D}$	1	W
Junction Temperature	TJ	-55~+175	°C
Storage Temperature	T <sub>STG</sub>	-55~+175	°C

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

- 2. T<sub>L</sub>=Lead temperature at 3/8 " (9.5mm) from body.
- 3. Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

#### **■ THERMAL DATA**

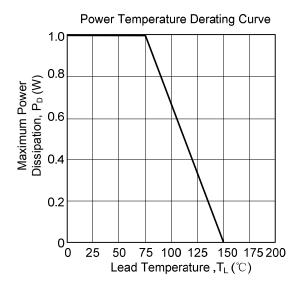
PARAMETER	SYMBOL	RATINGS	UNIT	
Junction to Ambient Air (Note 3)	$\theta_{JA}$	170	°C/W	

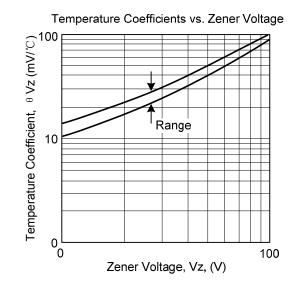
## ■ ELECTRICAL CHARACTERISTICS(Cont.)

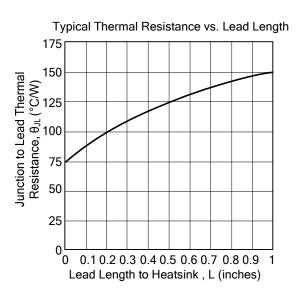
PART NUMBER	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		DC Zener	5 -
	V <sub>Z</sub> @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>		Current I <sub>ZM</sub>	Current I <sub>RM</sub>
	(V)	(mA)	(Ω)	(Ω)	(mA)	(µA)	(V)	(mA)	(mApK)
1N4745A	16	15.5	16	700	0.25	0.1	12.2	57	285

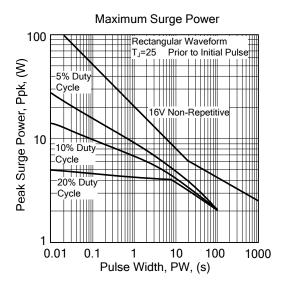
1N4745A DIODE

#### ■ TYPICAL CHARACTERISTICS









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