

**POWER DISCRETES**
**Description - Preliminary**

Quick reference data

$$V_R = 200 - 1000V$$

$$I_F = 1.5 - 2.0 A$$

$$t_{rr} = 30 - 60ns$$

$$V_F = 1.6 - 1.95V$$

**Features**

- ◆ Low reverse leakage current
- ◆ Hermetically sealed in fused metal oxide
- ◆ Good thermal shock resistance
- ◆ Low forward voltage drop
- ◆ Avalanche capability

**Absolute Maximum Ratings**

 Electrical specifications @  $T_A = 25^\circ C$  unless otherwise specified.

	Symbol	1N6620US	1N6621US	1N6622US	1N6623US	1N6624US	1N6625US	Units
Working Reverse Voltage	$V_{RWM}$	200	400	600	800	900	1000	V
Average Forward Current @ 110°C at the end caps	$I_{F(AV)}$	2.0	2.0	2.0	1.5	1.5	1.5	A
Non-Repetitive Surge Current ( $t_p = 8.3mS$ @ $V_R$ & $T_{JMAX}$ ) ( $t_p = 8.3mS$ , @ $V_R$ & $25^\circ C$ )	$I_{FSM}$	20	20	20	20	20	15	A
Storage Temperature Range	$T_{STG}$	-65 to +175						°C

**POWER DISCRETES**
**Electrical Specifications**

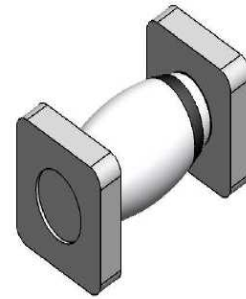
	Symbol	1N6620US	1N6621US	1N6622US	1N6623US	1N6624US	1N6625US	Units
Forward Voltage Drop max. @ $I_F$ , $T_j = 25^\circ\text{C}$	$V_F$	1.6 @ $I_F = 2\text{A}$	1.6 @ $I_F = 2\text{A}$	1.6 @ $I_F = 2\text{A}$	1.8 @ $I_F = 1.5\text{A}$	1.8 @ $I_F = 1.5\text{A}$	1.95 @ $I_F = 1.5\text{A}$	V
Reverse Current max. @ $V_{RWM}$ , $T_j = 25^\circ\text{C}$ @ $V_{RWM}$ , $T_j = 150^\circ\text{C}$	$I_R$ $I_R$	0.5 150	0.5 150	0.5 150	0.5 150	0.5 150	1.0 200	$\mu\text{A}$
Reverse Recovery Time max. 0.5A $I_F$ to 1.0A $I_{RM}$ recovers to 0.25A $I_{RM(REC)}$	$t_{rr}$	30	30	30	50	50	60	ns
Junction Capacitance typ. @ $V_R = 10\text{V}$ , $f = 1\text{MHz}$	$C_j$	10						pF

**Thermal Characteristics**

	Symbol	1N6620US	1N6621US	1N6622US	1N6623US	1N6624US	1N6625US	Units
Thermal Resistance to end cap	$R_{\theta JEC}$	13						$^\circ\text{C/W}$

**POWER DISCRETES**
**Ordering Information**

Part Number	Description
1N6620US 1N6621US 1N6622US 1N6623US 1N6624US 1N6625US	Surface Mount <sup>(1)</sup>

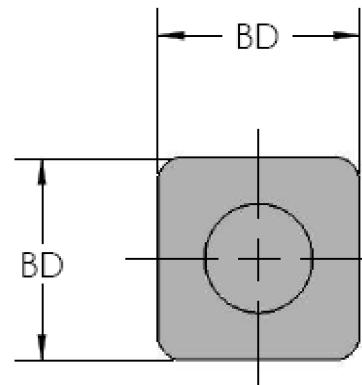
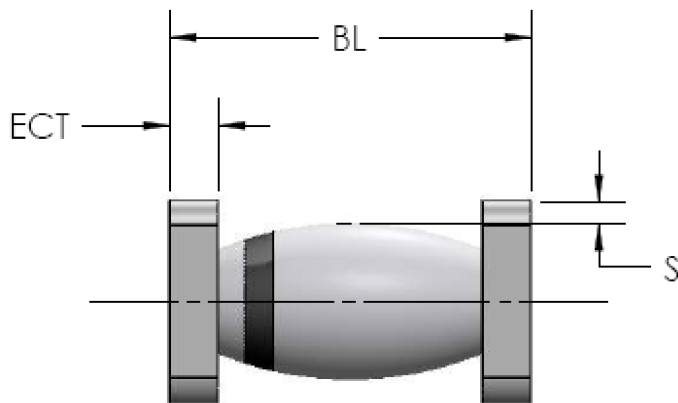


Note:

(1) Available in bulk and tape and reel packaging. Please consult factory for quantities.

**Outline Drawing**

Dimensions					
DIM <sup>N</sup>	Inches		Millimeters		Note
	MIN	MAX	MIN	MAX	
BD	0.091	0.103	2.31	2.62	-
BL	0.168	0.200	4.27	5.08	-
ECT	0.019	0.028	0.48	0.71	-
S	0.003		0.008		-


**Contact Information**

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