

TECHNICAL DATA
DATA SHEET 854, REV -

TRANSIENT VOLTAGE SUPPRESSOR DIODE
(1500 Watt)

DESCRIPTION: A 55.8 VOLT, 20 MILLIAMPER, AXIAL LEAD TRANSIENT VOLTAGE SUPPRESSOR DIODE.

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified.

RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage @ I_{BR}		55.8	-	-	Vdc
Test Current (I_{BR})		-	-	20	mAmps dc
Working Peak Reverse Voltage (W_{RWM})		-	-	47.1	Vdc
Maximum Reverse Current (I_{R1})	$T_A = 25^\circ\text{C}$	-	-	5.0	$\mu\text{Amps dc}$
Maximum Clamp Voltage $V_{C(max)}$	@ $I_P, t_p = 1\text{ms}$ 1N6161 1N6161A	-	-	89.3 85.5	Volts (pk)
Maximum Peak Pulse Current (I_P)	1N6161 1N6161A	-	-	16.8 17.6	Amps (pk)
Maximum Temperature Coefficient ($V_{(BR)}$)		-	-	0.10	$\%/^\circ\text{C}$
Maximum Reverse Current (I_R)	@ $T_A = 150^\circ\text{C}$	-	-	400	$\mu\text{Amps dc}$
Operating and Storage Temp. (T_{op} & T_{stg})		-55	-	+175	$^\circ\text{C}$

Notes:

$P_R = 3\text{W}$ (for 1,500W peak pulse power devices at $T_A = +25^\circ\text{C}$).

$P_R = 5\text{W}$ (for 1,500W peak pulse power devices at $T_L = +75^\circ\text{C}$ for $L = 0.375$ inch (9.53mm)).

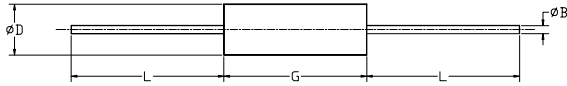
$P_{PR} = 1,500\text{W}$ at $t_p = 1\text{ms}$.

$-55^\circ\text{C} \leq T_{op} \leq +175^\circ\text{C}$, $-55^\circ\text{C} \leq T_{stg} \leq +175^\circ\text{C}$ (ambient temperatures).

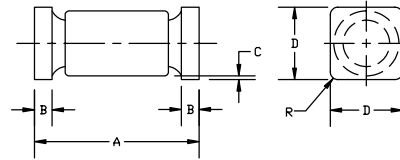
To order surface mount devices (MELFs), add the suffix US to the above listed part numbers.

MECHANICAL DIMENSIONS In Inches / (mm)

AXIAL



MELF



R = 0.020 Max

1500 W

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	ϕB	ϕD	G	L
AXIAL	.036/.042	.135/.185	.140/.195	1.00/1.30
	.92/1.07	3.43/4.70	3.56/4.95	25.4/33.02

1500 W

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	A	B	C	D
MELF	.205/.245	.019/.028	.003MIN	.183/.202
	5.21/6.22	.48/.71	.08MIN	4.65/5.13

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