

ABSOLUTE MAXIMUM RATINGS^(1,5)

DRAIN Voltage	-0.3 V to 700 V	Lead Temperature ⁽⁴⁾	260 °C
DRAIN Peak Current: TNY274.....	400 (750) mA ⁽²⁾		
TNY275.....	560 (1050) mA ⁽²⁾	Notes:	
TNY276.....	720 (1350) mA ⁽²⁾	1. All voltages referenced to SOURCE, $T_A = 25^\circ\text{C}$.	
TNY277.....	880 (1650) mA ⁽²⁾	2. The higher peak DRAIN current is allowed while the	
TNY278.....	1040 (1950) mA ⁽²⁾	DRAIN voltage is simultaneously less than 400 V.	
TNY279	1200 (2250) mA⁽²⁾	3. Normally limited by internal circuitry.	
TNY280	1360 (2550) mA ⁽²⁾	4. 1/16 in. from case for 5 seconds.	
EN/UV Voltage	-0.3 V to 9 V	5. Maximum ratings specified may be applied one at a time,	
EN/UV Current	100 mA	without causing permanent damage to the product.	
BP/M Voltage	-0.3 V to 9 V	Exposure to Absolute Maximum Rating conditions for	
Storage Temperature	-65 °C to 150 °C	extended periods of time may affect product reliability.	
Operating Junction Temperature ⁽³⁾	-40 °C to 150 °C		

THERMAL IMPEDANCE

Thermal Impedance: P or G Package:

$$(\theta_{JA}) \dots 70^\circ\text{C/W}^{(2)}; 60^\circ\text{C/W}^{(3)}$$

$$(\theta_{JC})^{(1)} \dots 11^\circ\text{C/W}$$

Notes:

1. Measured on the SOURCE pin close to plastic interface.
2. Soldered to 0.36 sq. in. (232 mm²), 2 oz. (610 g/m²) copper clad.
3. Soldered to 1 sq. in. (645 mm²), 2 oz. (610 g/m²) copper clad.

Parameter	Symbol	Conditions SOURCE = 0 V; $T_J = -40$ to 125°C See Figure 16 (Unless Otherwise Specified)		Min	Typ	Max	Units	
CONTROL FUNCTIONS								
Output Frequency in Standard Mode	f_{osc}	$T_J = 25^\circ\text{C}$ See Figure 4		Average	124	132	140	kHz
				Peak-to-peak Jitter		8		
Maximum Duty Cycle	DC_{MAX}	S1 Open		62	65		%	
EN/UV Pin Upper Turnoff Threshold Current	I_{DIS}			-150	-115	-90	μA	
EN/UV Pin Voltage	V_{EN}	$I_{EN/UV} = 25 \mu\text{A}$		1.8	2.2	2.6	V	
		$I_{EN/UV} = -25 \mu\text{A}$		0.8	1.2	1.6		
DRAIN Supply Current	I_{S1}	EN/UV Current > I_{DIS} (MOSFET Not Switching) See Note A			290		μA	μA
	I_{S2}	EN/UV Open (MOSFET Switching at f_{osc}) See Note B	TNY274		275	360		
			TNY275		295	400		
			TNY276		310	430		
			TNY277		365	460		
			TNY278		445	540		
			TNY279		510	640		
			TNY280		630	760		

