UH4PBC, UH4PCC, UH4PDC

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ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)							
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT	
Instantaneous forward voltage per diode	I _F = 1.0 A	T _A = 25 °C	V _F ⁽¹⁾	0.84	-	V	
	I _F = 2.0 A			0.93	1.05		
	I _F = 1.0 A	T _A = 125 °C		0.68	-		
	$I_F = 2.0 \text{ A}$			0.77	0.85		
Reverse current per diode	Rated V _R	T _A = 25 °C	I _R ⁽²⁾	-	5	μА	
		T _A = 125 °C		6.4	25		
Maximum reverse recovery time per diode	I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A		t _{rr}	20	25	ns	
Typical reverse recovery time per diode	$I_F = 1.0 \text{ A}, \text{ dI/dt} = 50 \text{ A/}\mu\text{s}, \ V_R = 30 \text{ V}, I_{rr} = 0.1 I_{RM}$			24	-		
Typical softness factor (t _b /t _a)per diode	$I_F = 2 \text{ A, dI/dt} = 200 \text{ A/µs,}$ $V_R = 200 \text{ V, } I_{rr} = 0.1 I_{RM}$ $T_A = 125 \text{ °C}$		S	0.3	-	-	
Typical reverse recovery current per diode			I _{RM}	5.4	-	Α	
Typical stored charge per diode			Q _{rr}	88	-	nC	
Typical junction capacitance per diode	4.0 V, 1 MHz		CJ	21	-	pF	

Notes

(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise specified)						
PARAMETER	SYMBOL	UH4PBC	UH4PCC	UH4PDC	UNIT	
Typical thermal resistance per diode	R _{θJA} ⁽¹⁾	60			°C/W	
Typical trieffial resistance per diode	$R_{ heta JL}$	4				

Note

 $^{\mbox{\scriptsize (1)}}$ Units mounted on recommended PCB 1 oz. pad layout

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
UH4PDC-M3/86A	0.10	86A	1500	7" diameter plastic tape and reel			
UH4PDC-M3/87A	0.10	87A	6500	13" diameter plastic tape and reel			
UH4PDCHM3/86A (1)	0.10	86A	1500	7" diameter plastic tape and reel			
UH4PDCHM3/87A (1)	0.10	87A	6500	13" diameter plastic tape and reel			

Note

(1) Automotive grade

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RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

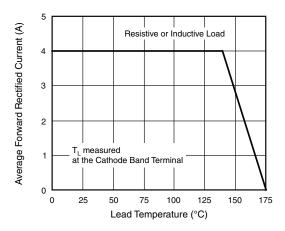


Fig. 1 - Maximum Forward Current Derating Curve

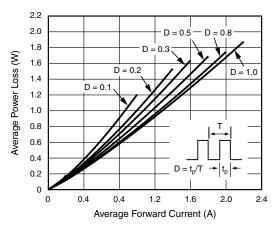


Fig. 2 - Forward Power Loss Characteristics Per Diode

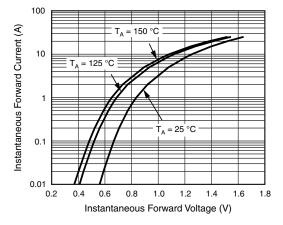


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

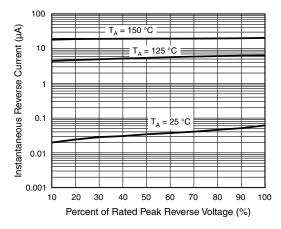


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode

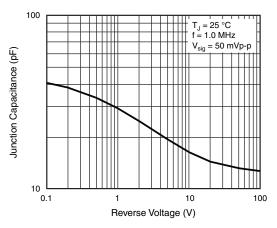


Fig. 5 - Typical Junction Capacitance Per Diode

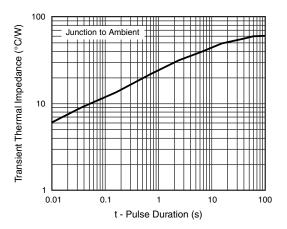


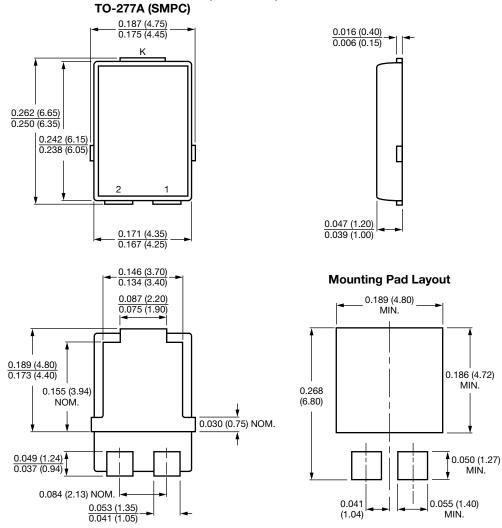
Fig. 6 - Typical Transient Thermal Impedance Per Diode





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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)



Conform to JEDEC TO-277A

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