

UH10JT & UHF10JT

Vishay General Semiconductor



ELECTRICAL CHARACTERISTICS (T _C = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS		SYMBOL	TYP.	MAX.	UNIT
Reverse current ⁽²⁾	V _R = 600 V	T _A = 25 °C T _A = 125 °C	I _R	- 27	10 150	μA
Maximum reverse recovery time	I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A		t _{rr}	-	25	ns
	I _F = 1.0 A, dI/dt = 50 A/μs, V _R = 30 V, I _{rr} = 0.1 I _{RM}			-	45	
Typical softness factor (t _b /t _a)	I _F = 10 A, dI/dt = 200 A/μs, V _R = 400 V, T _J = 125 °C		S	0.45	-	-
Typical reverse recovery c urrent			I _{RM}	7.5	-	A
Typical stored charge			Q _{rr}	200	-	nC
Typical forward recovery time	I _F = 10 A, dI/dt = 80 A/μs, V _F = 1.1 x V _{F max.}		t _{fr}	160	-	ns

Notes:(1) Pulse test: 300 μs pulse width, 1 % duty cycle(2) Pulse test: Pulse width $\leq 40\text{ ms}$

THERMAL CHARACTERISTICS ($T_C = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)				
PARAMETER	SYMBOL	UH10JT	UHF10JT	UNIT
Typical thermal resistance from junction to case	$R_{\theta JC}$	2.0	4.0	$^{\circ}\text{C}/\text{W}$

ORDERING INFORMATION (Example)					
PACKAGE	PREFERRED P/N	UNIT WEIGHT (g)	PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
TO-220AC	UH10JT-E3/4W	1.84	4W	50/tube	Tube
ITO-220AC	UHF10JT-E3/45	1.73	45	50/tube	Tube

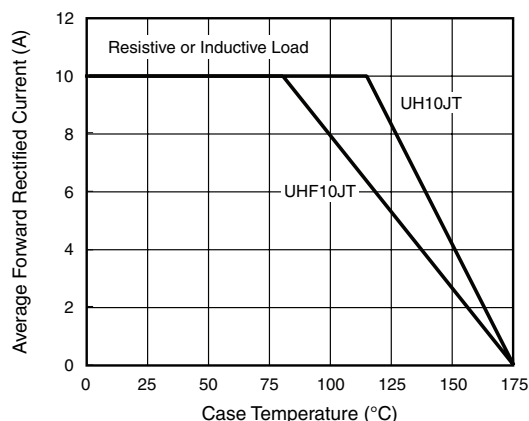
RATINGS AND CHARACTERISTICS CURVES($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

Figure 1. Maximum Forward Current Derating Curve

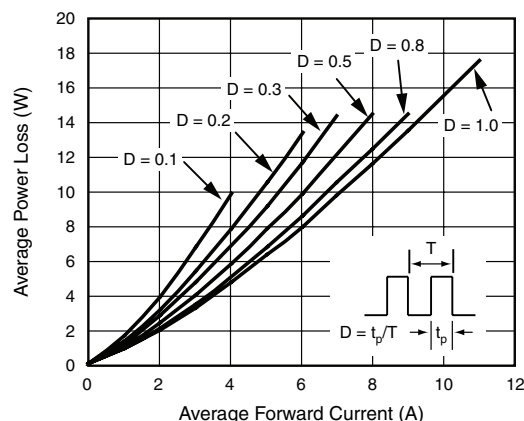


Figure 2. Forward Power Loss Characteristics

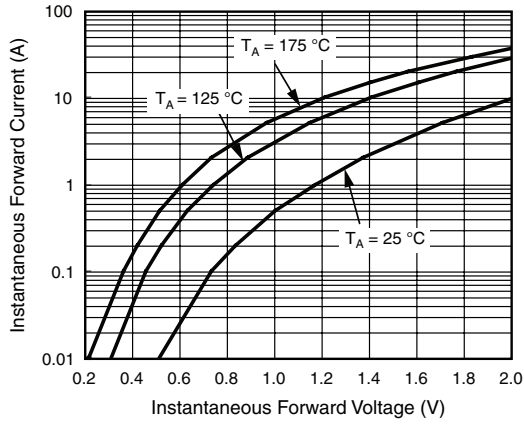


Figure 3. Typical Instantaneous Forward Characteristics

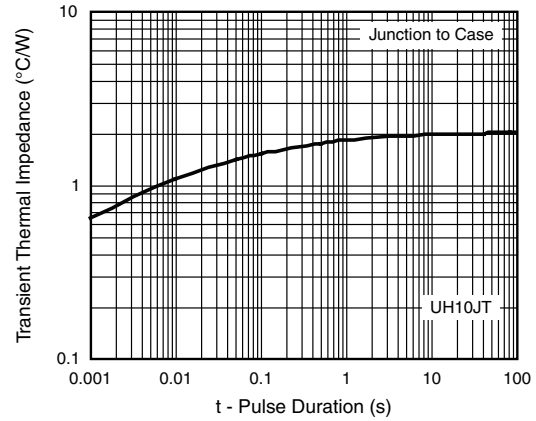


Figure 6. Typical Transient Thermal Impedance

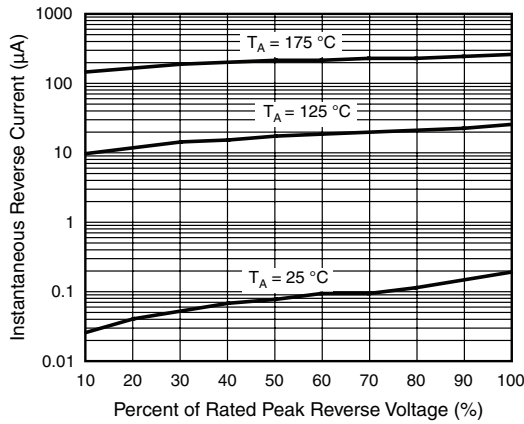


Figure 4. Typical Reverse Leakage Characteristics

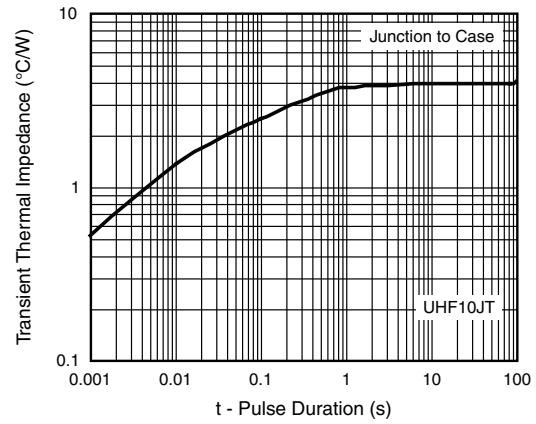


Figure 7. Typical Transient Thermal Impedance

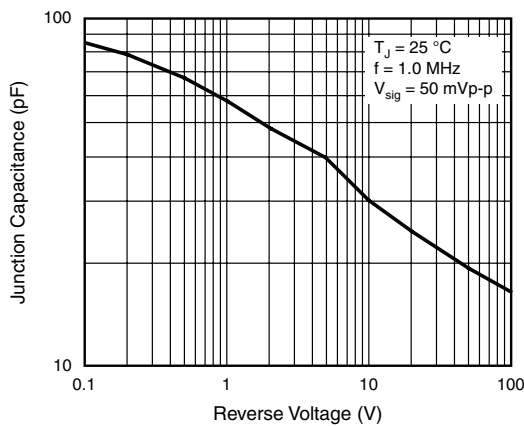
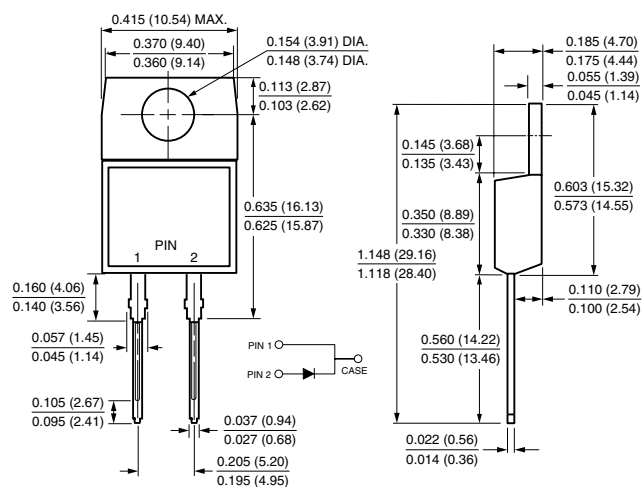


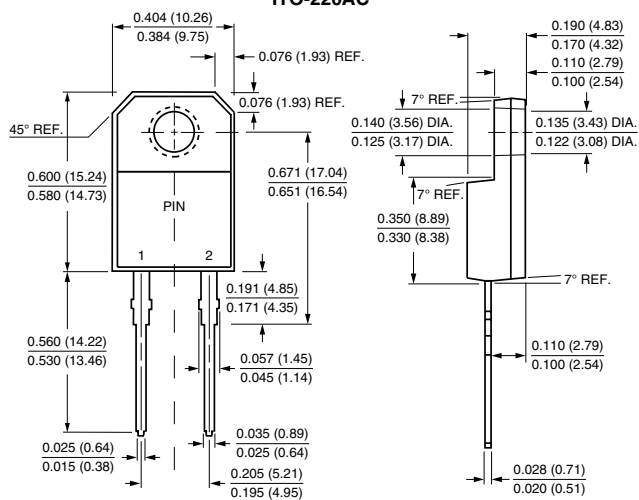
Figure 5. Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

TO-220AC



ITO-220AC





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