ELECTRICAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)					
PARAMETER	**TEST CONDITIONS**		**SYMBOL**	**VALUE**	**UNIT**
Maximum instantaneous forward voltage (1)	I_F = 6 A I_F = 6 A	T_J = 25 °C T_J = 125 °C	V_F	1.8 1.5	V
Maximum DC reverse current at V_{RRM}		T_J = 25 °C T_J = 125 °C	I_R	100 1.0	µA mA
Maximum reverse recovery time	I_F = 1.0 A, dI/dt = 50 A/µs, V_R = 30 V, I_{rr} = 0.1 I_{RM}		t_{rr}	135	ns
Typical forward recovery time	I_F = 6 A, dI/dt = 48 A/µs, V_{FR} = 3 V		t_{fr}	350	ns
Peak forward recovery overshoot voltage	I_F = 6 A, dI/dt = 48 A/µs	typical maximum	V_{FP}	10 14	V

Note:

(1) Pulse test: 300 µs pulse width, 2 % duty cycle

THERMAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)					
PARAMETER	**SYMBOL**	**DTV56**	**DTV56B**	**DTV56F**	**UNIT**
Typical thermal resistance from junction to case	$R_{\theta JC}$	2.0		4.0	°C/W

ORDERING INFORMATION (Example)					
PACKAGE	**PREFERRED P/N**	**UNIT WEIGHT (g)**	**PACKAGE CODE**	**BASE QUANTITY**	**DELIVERY MODE**
TO-220AC	DTV56-E3/45	1.80	45	50/tube	Tube
ITO-220AC	DTV56F-E3/45	1.95	45	50/tube	Tube
TO-263AB	DTV56B-E3/45	1.77	45	50/tube	Tube
TO-263AB	DTV56B-E3/81	1.77	81	800/reel	Tape and reel

RATINGS AND CHARACTERISTICS CURVES

(T_A = 25 °C unless otherwise noted)

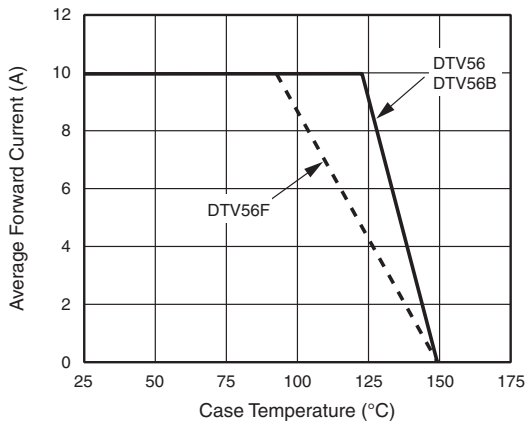


Figure 1. Forward Current Derating Curve

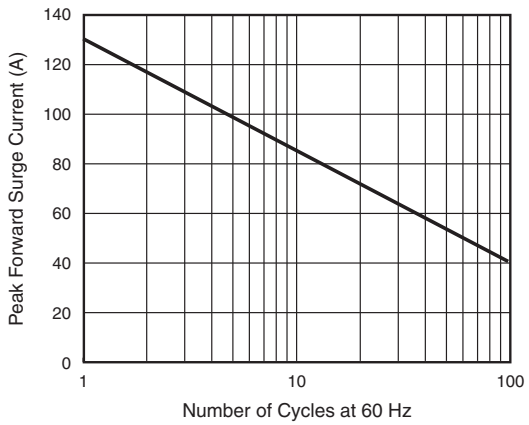


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

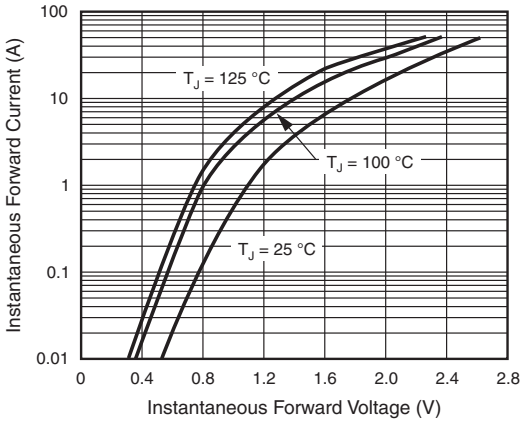


Figure 3. Typical Forward Voltage

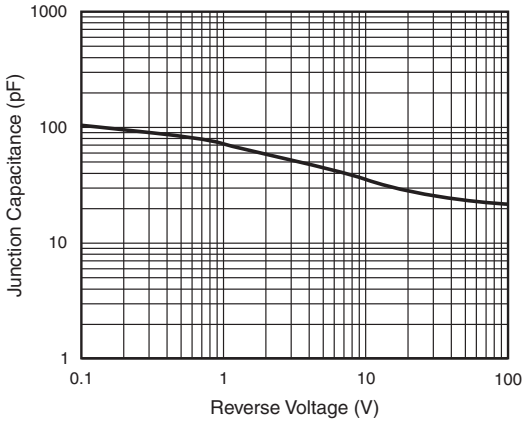


Figure 5. Typical Capacitance

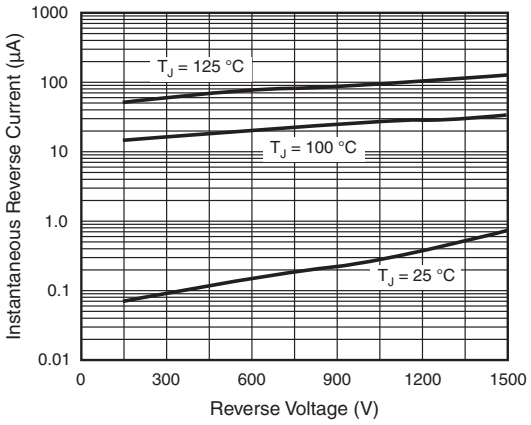


Figure 4. Typical Reverse Current

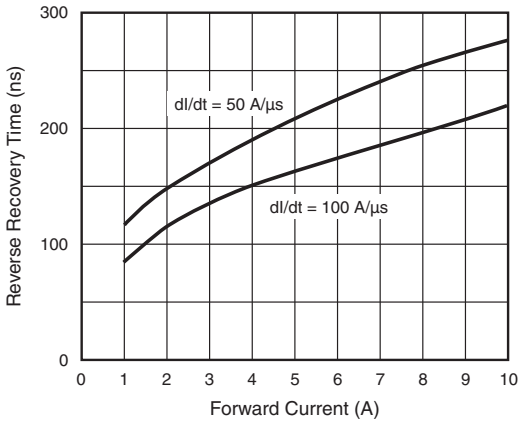
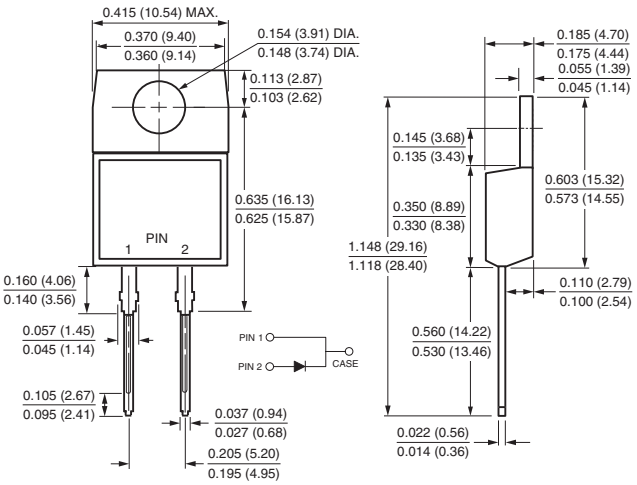


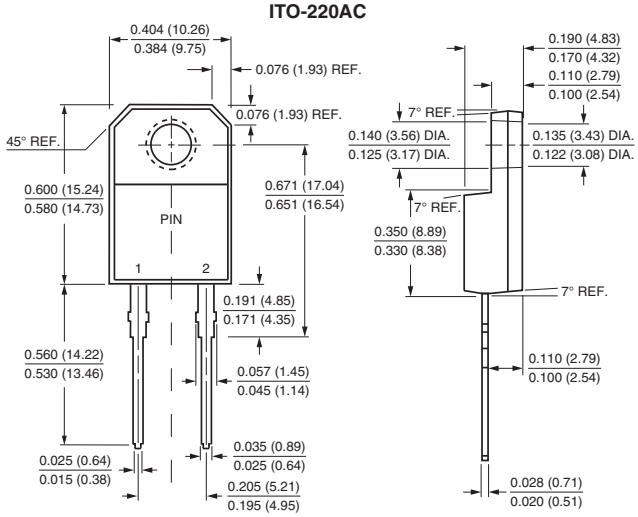
Figure 6. Typical Reverse Recovery Time

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

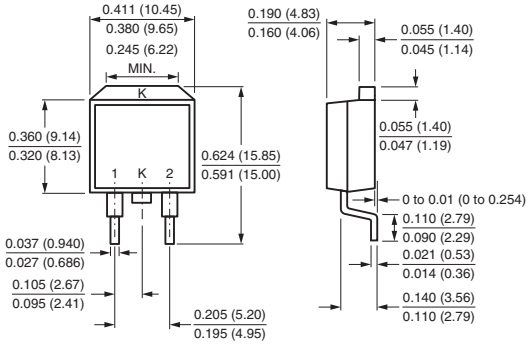
TO-220AC



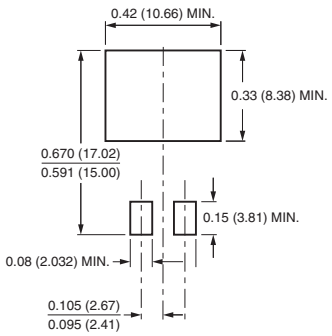
ITO-220AC



TO-263AB



Mounting Pad Layout



For technical questions within your region, please contact one of the following:
DiodesAmericas@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com

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