



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

PARAMETER	TEST CONDITIONS	SYMBOL	BY500-100	BY500-200	BY500-400	BY500-600	BY500-800	UNIT
Maximum instantaneous forward voltage	5.0 A	V_F	1.35					V
Maximum DC reverse current at rated DC blocking voltage	$T_A = 25^\circ\text{C}$	I_R	10					μA
	$T_A = 100^\circ\text{C}$		1.0					mA
Maximum reverse recovery time	$I_F = 1.0\text{ A}$, $V_R = 30\text{ V}$, $di/dt = 50\text{ A}/\mu\text{s}$, $I_{rr} = 10\% I_{RM}$	t_{rr}	200					ns
Maximum reverse recovery current		$I_{RM(REC)}$	2.0					A
Typical junction capacitance	4.0 V, 1 MHz	C_J	28					pF

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

PARAMETER	SYMBOL	BY500-100	BY500-200	BY500-400	BY500-600	BY500-800	UNIT
Typical thermal resistance	$R_{\theta JA}^{(1)}$	22					$^\circ\text{C}/\text{W}$

Note

(1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length with both leads to heat sink

ORDERING INFORMATION (Example)

PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
BY500-400-E3/54	1.1	54	1400	13" diameter paper tape and reel
BY500-400-E3/73	1.1	73	1000	Ammo pack packaging

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

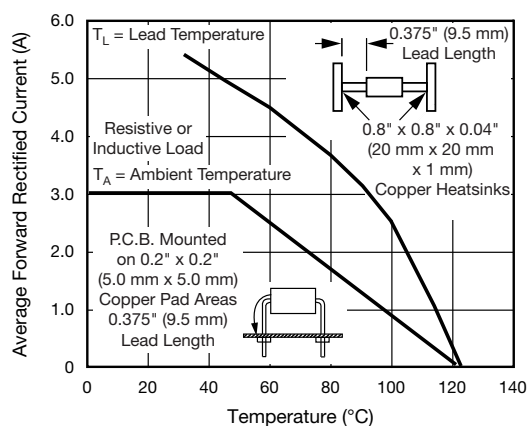


Fig. 1 - Forward Current Derating Curves

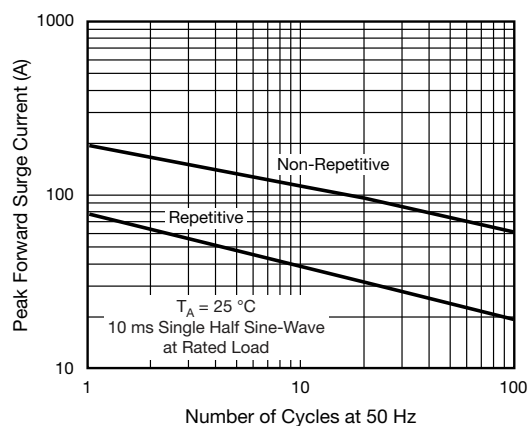
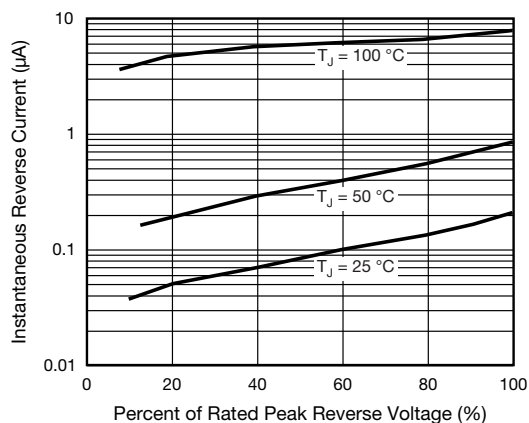
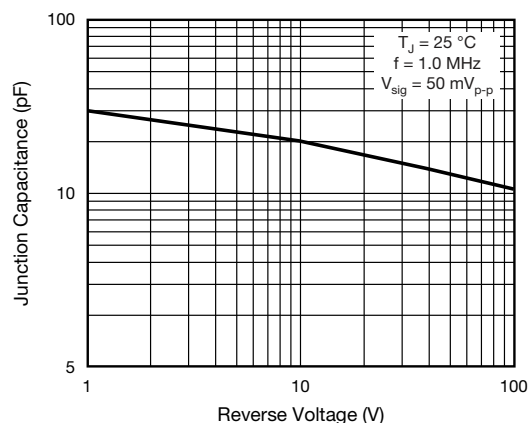
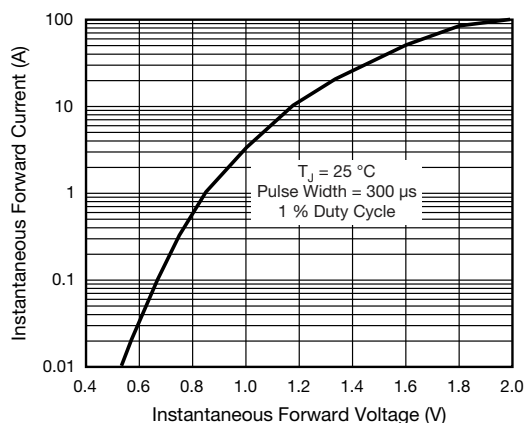
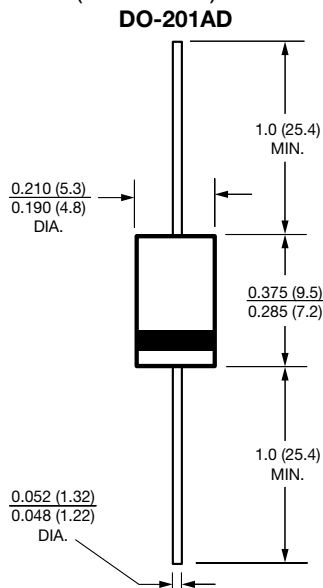


Fig. 2 - Maximum Peak Forward Surge Current



PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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