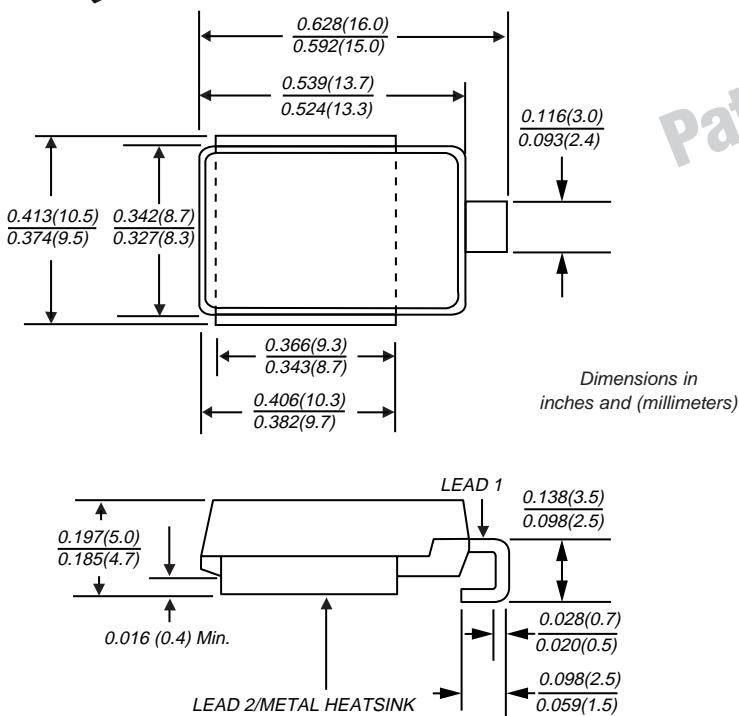
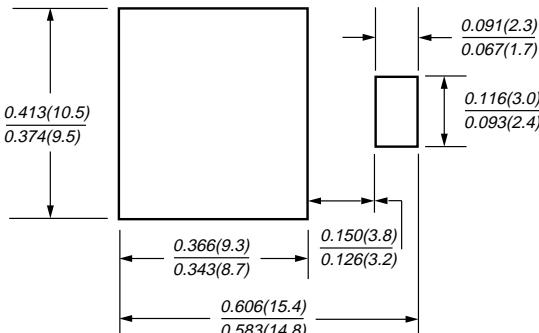


Surface Mount Automotive Transient Voltage Suppressor


DO-218AB


**Zener Voltage 27V Peak Pulse Current 130A(10/10,000μs)
 Peak Pulse Power 6600W (10/1,000μs)**

*Patented**

Mounting Pad Layout


* Patent #'s:
 4,980,315
 5,166,769
 5,278,095

Features

- Ideally suited for load dump protection
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature stability due to unique oxide passivation and patented PAR® construction
- Integrally molded heatsink provides a very low thermal resistance for maximum heat dissipation
- Low leakage current at $T_J = 175^\circ\text{C}$
- High temperature soldering guaranteed: 260°C for 10 seconds at terminals
- Meets ISO7637-2 surge spec.
- Low forward voltage drop

Mechanical Data

Case: Molded plastic body, surface mount with heatsink integrally mounted in the encapsulation

Terminals: Plated, solderable per MIL-STD-750, Method 2026

Polarity: Heatsink is anode

Mounting Position: Any

Weight: 0.091 oz., 2.58 g

Packaging codes/options:

- 2D/750 per 13" Reel (16mm Tape),
 anode towards sprocket hole, 4.5K/box
- 2E/750 per 13" Reel (16mm Tape),
 cathode towards sprocket hole, 4.5K/box

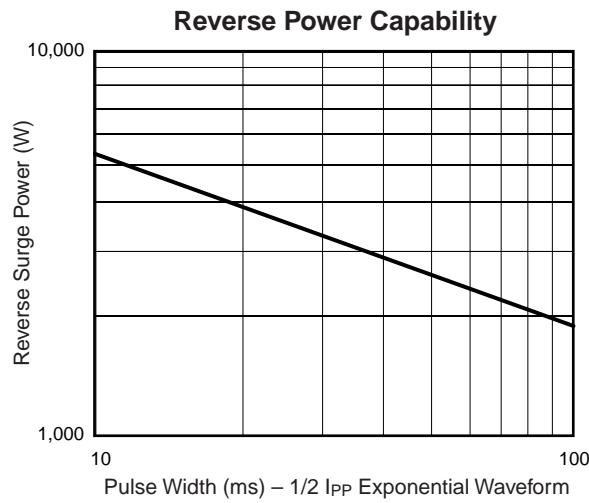
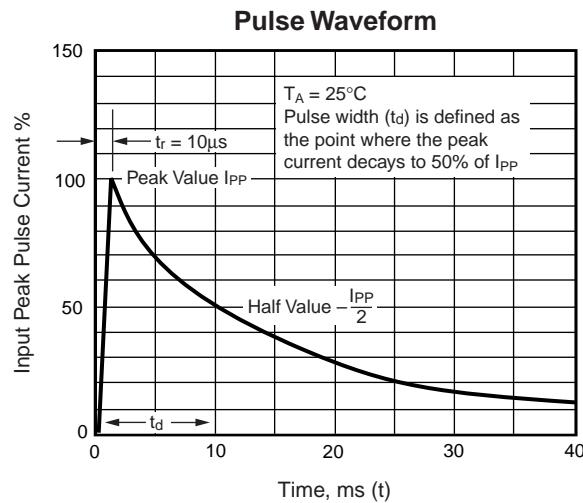
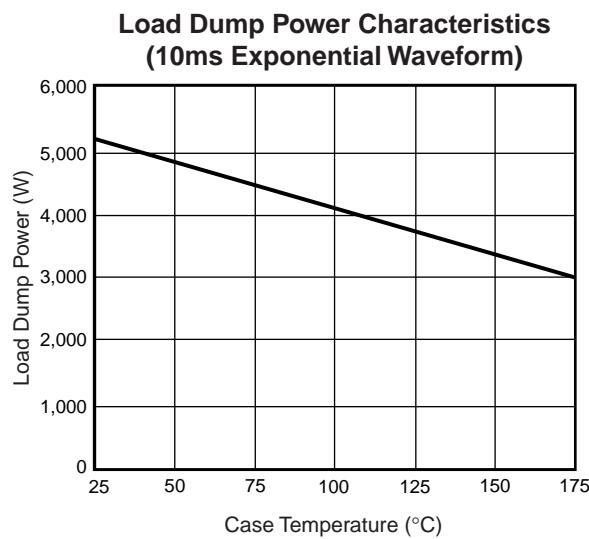
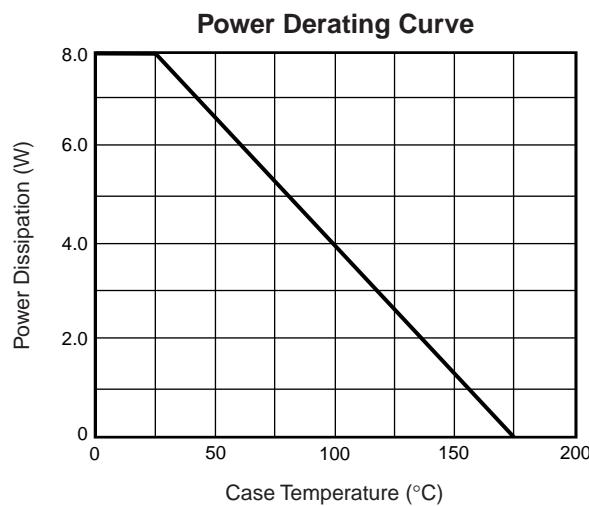
Maximum Ratings and Thermal Characteristics ($T_C = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Steady state power dissipation	P_D	8.0	W
Non-repetitive peak reverse surge current for 10μs/10ms exponentially decaying waveform	I_{RSM}	130	A
Maximum working stand-off voltage	V_{WM}	22.0	V
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	700	A
Typical thermal resistance junction to case	$R_{\theta JC}$	0.90	°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +175	°C

Electrical Characteristics ($T_C = 25^\circ\text{C}$ unless otherwise noted)

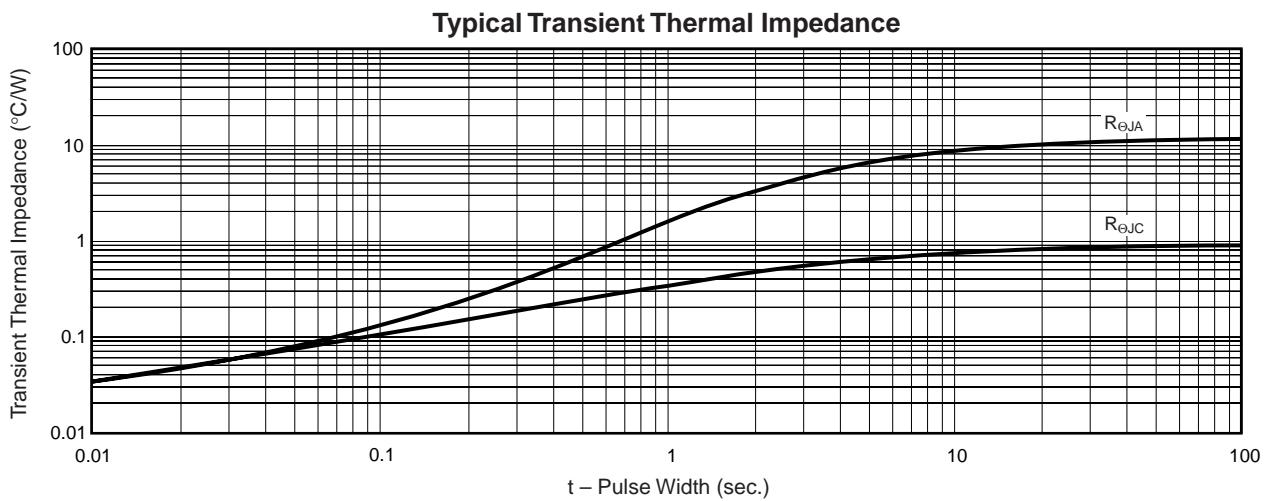
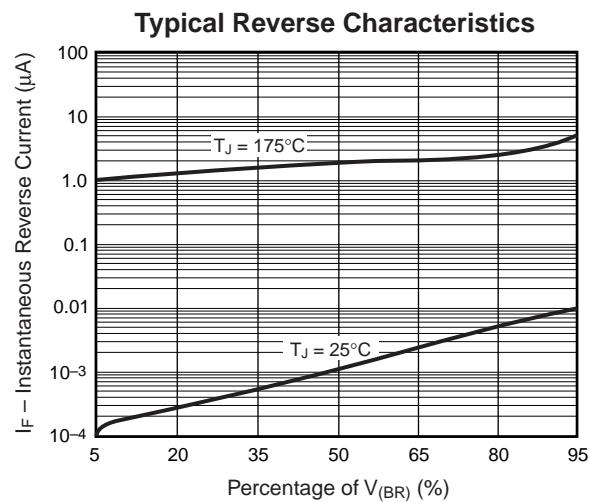
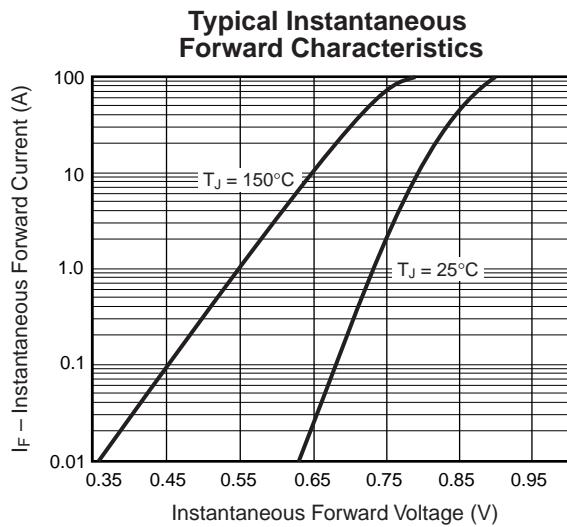
Parameter	Symbol	Min	Typ	Max	Unit
Reverse zener voltage at 10mA	V_Z	24.0	—	30.0	V
Zener voltage temperature coefficient at $I_Z = 10\text{mA}$	V_{ZTC}	—	—	36	$\text{mV}/^\circ\text{C}$
Clamping voltage for $10\mu\text{s}/10\text{ms}$ exponentially decaying waveform at $I_{PP} = 75\text{A}$	V_C	—	—	40.0	V
Instantaneous forward voltage ⁽¹⁾	V_F	—	—	0.98	V
at 6.0A		—	0.93	—	
at 100A		—	—	—	
Reverse leakage current at rated V_{WM}	I_R	—	—	1.0	μA
$T_J = 25^\circ\text{C}$		—	—	50.0	
$T_J = 175^\circ\text{C}$		—	—	—	

Notes: (1) Measured on a $300\mu\text{s}$ square pulse width

Ratings and Characteristic Curves $T_A=25^\circ\text{C}$ unless otherwise noted.

Ratings and Characteristic Curves

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



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