

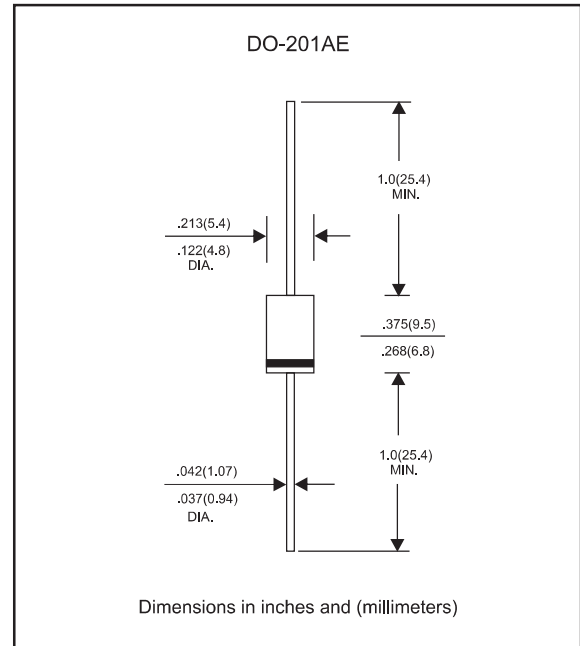
Features

- Excellent clamping capability
- Low dynamic impedance
- Solder dip 275°C max. 7s, per JESD 22-B106
- Suffix "-H" indicates Halogen free parts

Mechanical data

- Case: DO-201AE
- Molding compound meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD 22-B102

Package outline



Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation with 10/1000us waveform ⁽¹⁾	P _{PPM}	1500	W
Power dissipation on infinite heatsink at T _L = 75°C	P _D	6.5	W
Peak pulse current with 10/1000us waveform ⁽¹⁾	I _{PPM}	See next table	A
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Typ.	Unit
Thermal resistance Junction to Lead	R _{thJL}	15.4	°C/W
Thermal resistance Junction to Ambient	R _{thJA}	75	°C/W

Notes:

(1) Non-repetitive current pulse, per Fig. 3 and derated above T_A = 25°C per Fig.2.

Electrical characteristics (at T_A=25°C unless otherwise noted)

Device Type	Breakdown Voltage V _{BR} (V) @ I _T		Test Current	Max. Clamping Voltage	Max. Peak Pulse Current	Max. Reverse Leakage Current	Working Peak Reverse Voltage
	Min.	Max.	I _T (mA)	V _C (V) @ I _{PPM}	I _{PPM} (A)	IR(μA) @ V _{RWM}	V _{RWM} (V)
1.5KE480CA	456	504	1.0	658	2.28	5.0	408
1.5KE500CA	475	525	1.0	690	2.17	5.0	427.5
1.5KE510CA	485	535	1.0	698	2.15	5.0	434
1.5KE520CA	494	546	1.0	717.6	2.09	5.0	444.6
1.5KE540CA	513	567	1.0	740	2.03	5.0	459
1.5KE550CA	522.5	577.5	1.0	759	1.98	5.0	470.3
1.5KE600CA	570	630	1.0	828	1.81	5.0	513

Typical Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

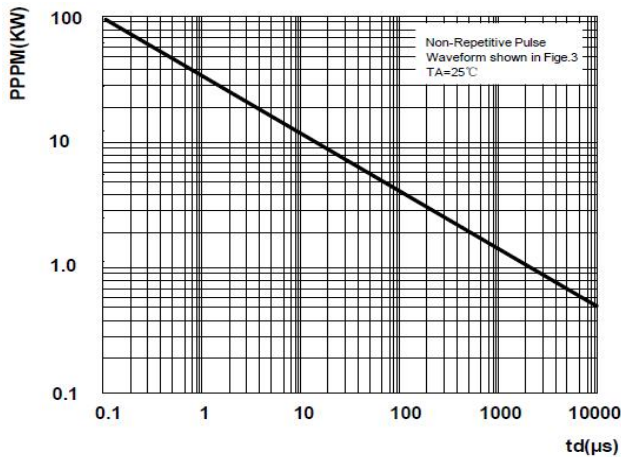


Fig. 2 - Pulse Power or Current vs Initial Junction Temperature

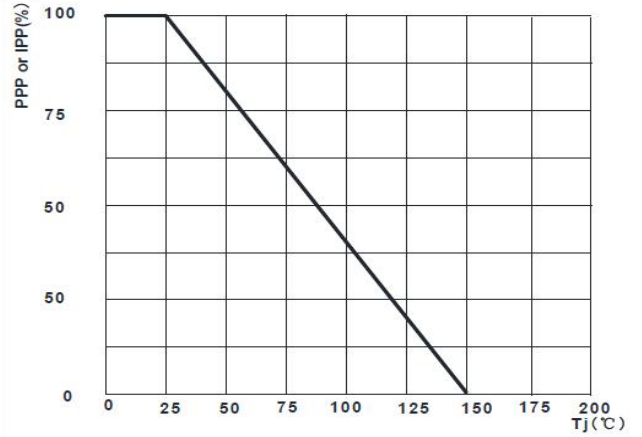


Fig. 3 - Pulse Waveform

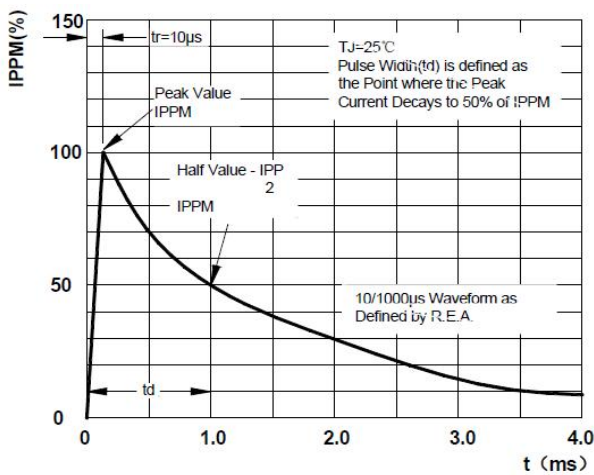


Fig. 4 - Power Derating Curve

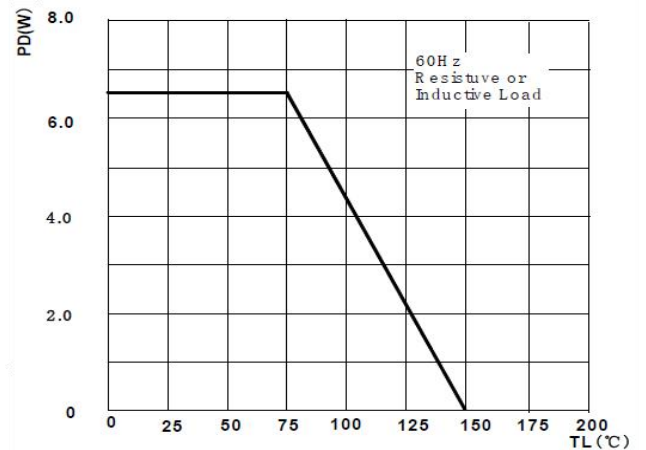
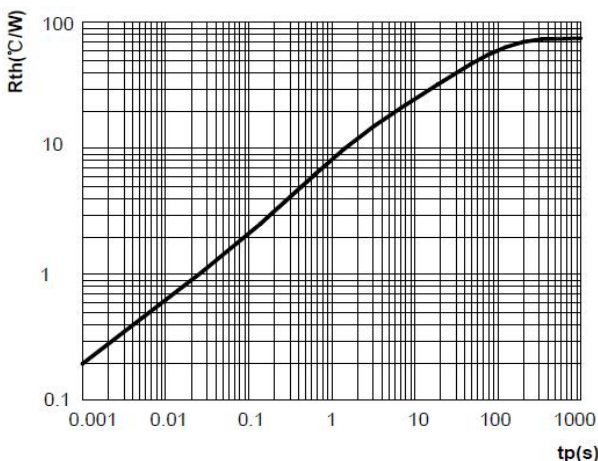


Fig. 5 - Typical Transient Thermal Impedance



Pinning information

Pin	Simplified outline	Symbol
Bi-Directional	