

# P6 KE200...P6 KE440CA, P6 KE520C



**Axial lead diode**

## Unidirectional and bidirectional Transient Voltage Suppressor diodes

**P6 KE200...P6 KE440CA, P6 KE520C**

### Pulse Power

**Dissipation: 600 W**

**Maximum Stand-off voltage: 162 ... 423 V**

### Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- For bidirectional types (suffix "C" or "CA"), electrical characteristics apply in both directions.
- The standard tolerance of the breakdown voltage for each type is  $\pm 10\%$ . Suffix "A" denotes a tolerance of  $\pm 5\%$ .

### Mechanical Data

- Plastic case DO-15 / DO-204AC
- Weight approx.: 0,4 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 4000 per ammo

- 1) Non-repetitive current pulse see curve  $I_{PPM} = f(t_r)$
- 2) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case
- 3) Unidirectional diodes only

Absolute Maximum Ratings		$T_c = 25^\circ\text{C}$ , unless otherwise specified	
Symbol	Conditions	Values	Units
$P_{PPM}$	Peak pulse power dissipation 10 / 1000 $\mu\text{s}$ waveform <sup>1)</sup> $T_a = 25^\circ\text{C}$	600	W
$P_{M(AV)}$	Steady state power dissipation <sup>2)</sup> , $T_a = 25^\circ\text{C}$	5	W
$I_{FSM}$	Peak forward surge current, 60 Hz half sine-wave <sup>3)</sup> $T_a = 25^\circ\text{C}$	100	A
$R_{thA}$	Max. thermal resistance junction to ambient <sup>2)</sup>	30	K/W
$R_{thT}$	Max. thermal resistance junction to terminal	15	K/W
$T_j$	Operating junction temperature	- 50 ... + 175	$^\circ\text{C}$
$T_s$	Storage temperature	- 50 ... + 175	$^\circ\text{C}$
$V_f$	Max. instant. forw. voltage $I_f = 50\text{ A}$ <sup>3)</sup>	$V_{BR} \leq 200\text{V}, V_F < 3,5$	V
		$V_{BR} > 200\text{V}, V_F < 5,0$	V

Type	Characteristics						
	Max stand-off voltage@ $I_D$		Breakdown voltage@ $I_T$		Test current $I_T$ mA	Max. clamping voltage@ $I_{PPM}$	
	$V_{WM}$ V	$I_D$ $\mu\text{A}$	min. V	max. V		$V_C$ V	$I_{PPM}$ A
P6KE200	162	5	180	220	1	287	2,1
P6KE200A	171	5	190	210	1	274	2,2
P6KE220	175	5	198	242	1	344	1,8
P6KE220A	185	5	209	231	1	328	1,9
P6KE250	202	5	225	275	1	360	1,7
P6KE250A	214	5	237	263	1	344	1,8
P6KE300	243	5	270	330	1	430	1,4
P6KE300A	256	5	285	315	1	414	1,5
P6KE350	284	5	315	385	1	504	1,2
P6KE350A	300	5	332	368	1	482	1,3
P6KE400	324	5	360	440	1	574	1
P6KE400A	342	5	380	420	1	548	1,1
P6KE440	356	5	396	484	1	631	0,99
P6KE440A	376	5	418	462	1	602	1,04
P6KE520C	423	5	470	570	1	745	0,81



