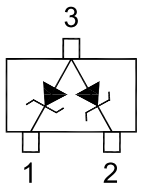
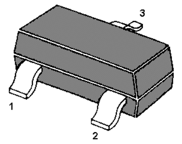
ESD05CA

Silicon Epitaxial Planar Diodes

TVS diode array for ESD protection in
portable electronics





1. Cathode 2. Cathode 3. Anode
Marking Code: **5HA**
SOT-23 Plastic Package

Features

- Protects one bidirectional line or two unidirectional lines
- Low clamping voltage
- Low leakage current

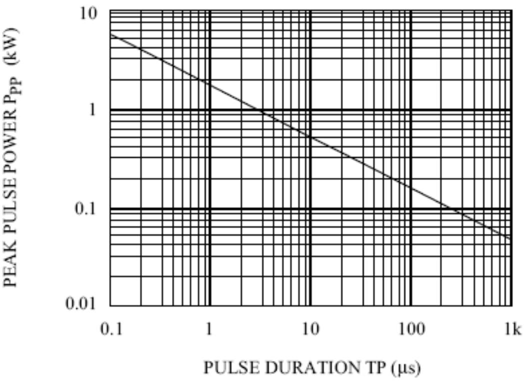
Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Reverse Stand-Off Voltage	V_{RWM}	5	V
Peak Pulse Current (tp = 8/20 µs)	I_{PP}	24	A
Peak Pulse Power (tp = 8/20 µs)	P_{PK}	350	W
Operation Temperature Range	T_j	- 55 to + 150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

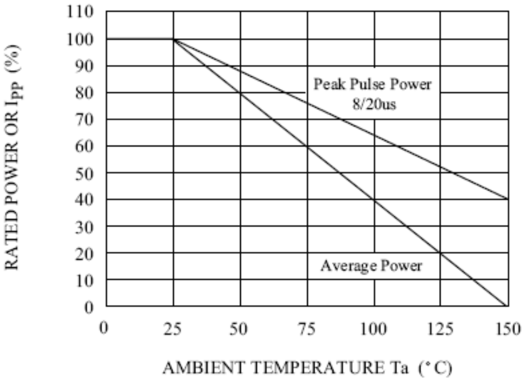
Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 1 mA	$V_{(BR)R}$	6	-	V
Reverse Current at V_R = 5 V	I_R	-	20	µA
Clamping Voltage at I_{PP} = 24 A, tp = 8/20 µs	V_C	-	14.5	V
Junction Capacitance at V_R = 0 V, f = 1 MHz (Pin 1 to 3 and Pin 2 to 3)	C_J	-	400	pF

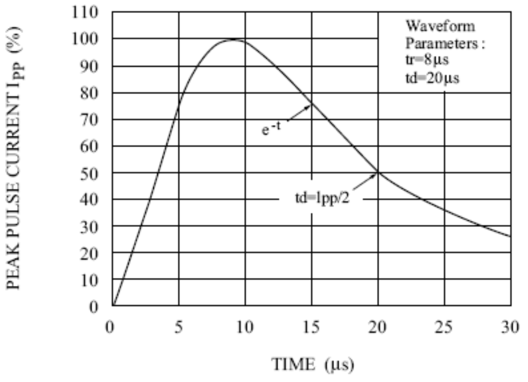
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



C_J - V_R