



Micro Commercial Components  
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## CPT30035 THRU CPT30090

### Features

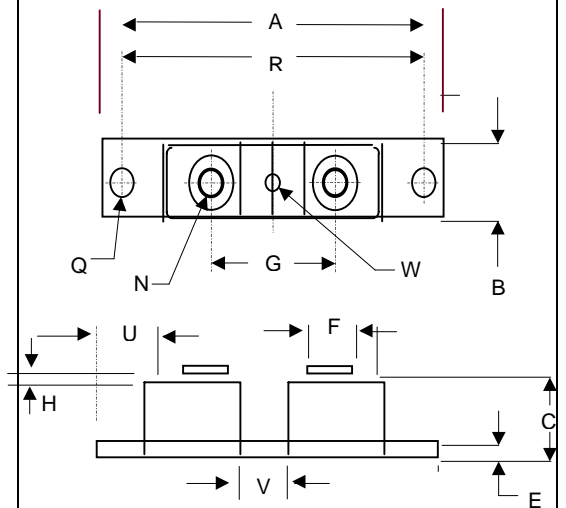
- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

### Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
CPT30035	35V	24.5V	35V
CPT30040	40V	28 V	30V
CPT30045	45V	31.5V	45V
CPT30050	50V	35 V	50V
CPT30060	60V	42 V	60V
CPT30080	80V	56 V	80V
CPT30090	90V	63 V	90V

### Power Mod ( Twin Tower )



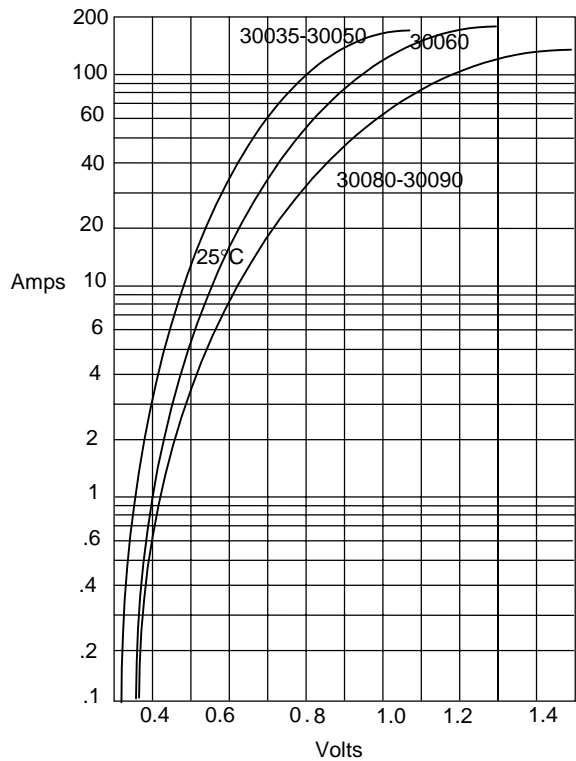
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	300 A	$T_L = 138^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	2000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 30035-30050 30060 30080-30090	$V_F$	.70 V .82 V .98 V	$I_{FM} = 150 \text{ A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	4mA	$T_A = 25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	4600pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIMENSIONS					
DIM	INCH ES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	3.630	----	92.20	
B	0.700	0.800	17.78	20.32	
C	----	0.630	----	16.00	
E	0.120	0.130	3.05	3.30	
F	0.490	0.510	12.45	12.95	
G	1.375	BSC	34.92	BSC	
H	0.010	----	0.25	----	
N	----	----	----	----	1/4
Q	0.275	0.290	6.99	7.37	Did
R	3.150	BSC	80.01	BSC	
U	.600	----	15.24	----	
V	.312	.340	7.92	8.64	
W	.180	.195	4.57	4.95	Did

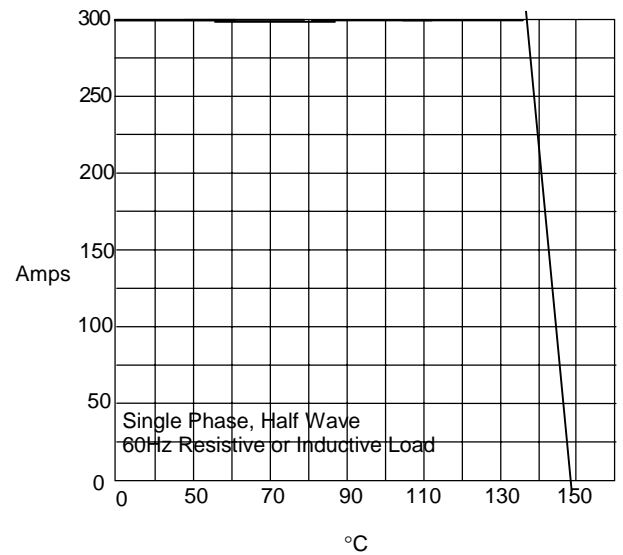
\*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

Figure 1  
Typical Forward Characteristics



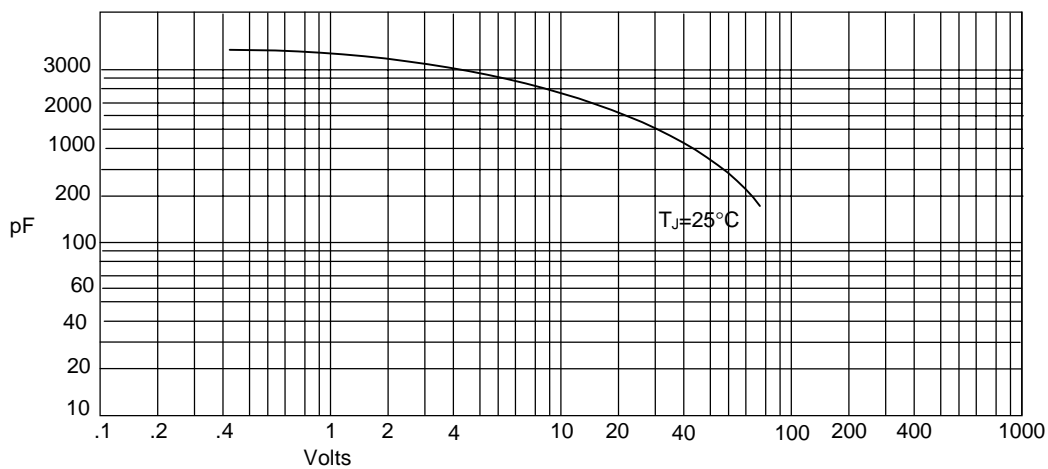
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

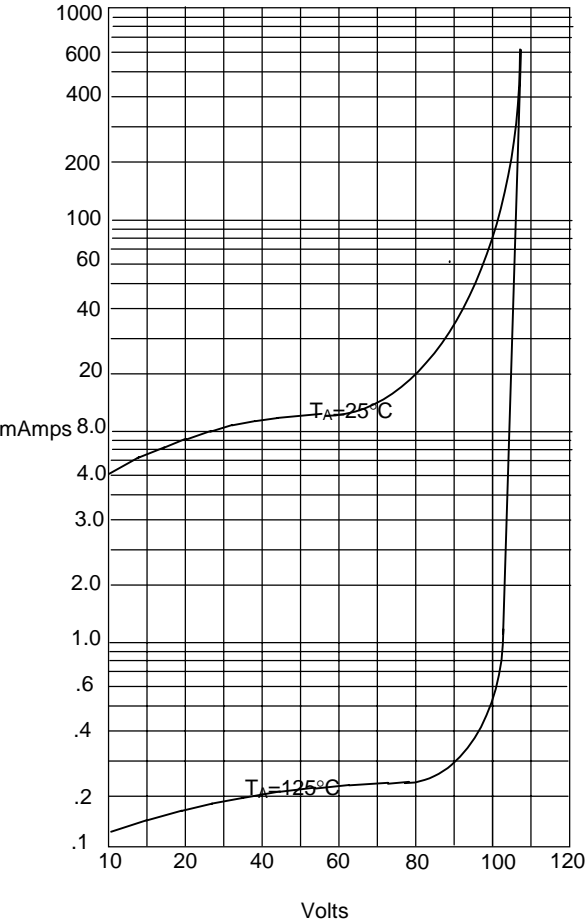
Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

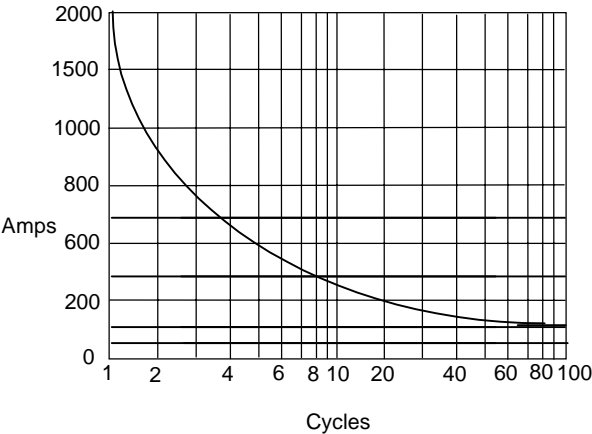


Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles