



**ELECTRICAL CHARACTERISTICS (PER LEG)**

Parameter	Symbol	Min	Typ	Max	Units
Forward Voltage $I_F = 10A$ $T_J = 25^\circ C$ $I_F = 10A$ $T_J = 175^\circ C$	$V_F$		1.6 2.0	1.8 2.4	V
Reverse Current $V_R = 600V$ $T_J = 25^\circ C$ $V_R = 600V$ $T_J = 175^\circ C$	$I_R$		50 100	200 1000	$\mu A$
Total Capacitive Charge $V_R = 600V, I_F = 10A, di/dt = 500 A/\mu s, T_J = 25^\circ C$	$Q_C$		28		nC
Total Capacitance $V_R = 0V, T_J = 25^\circ C, f = 1MHz$ $V_R = 200V, T_J = 25^\circ C, f = 1MHz$ $V_R = 400V, T_J = 25^\circ C, f = 1MHz$	C		550 65 50		pF

**NOTE:**

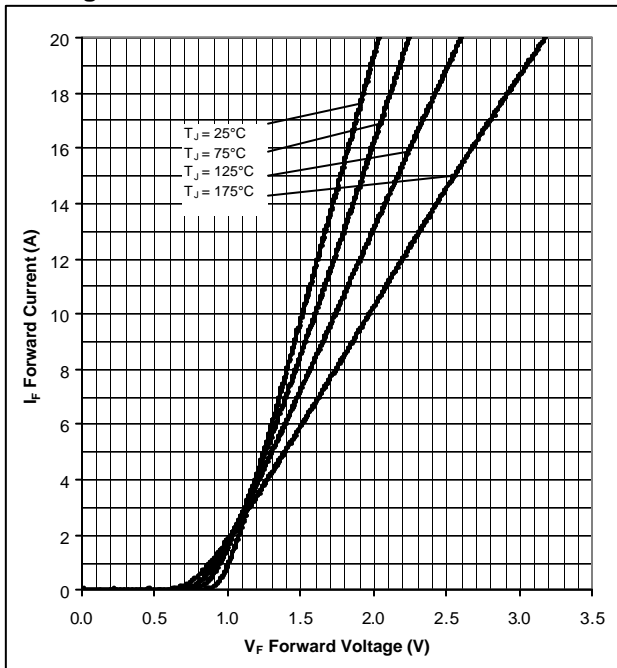
1. This is a majority carrier diode, so there is no reverse recovery charge.

**THERMAL CHARACTERISTICS**

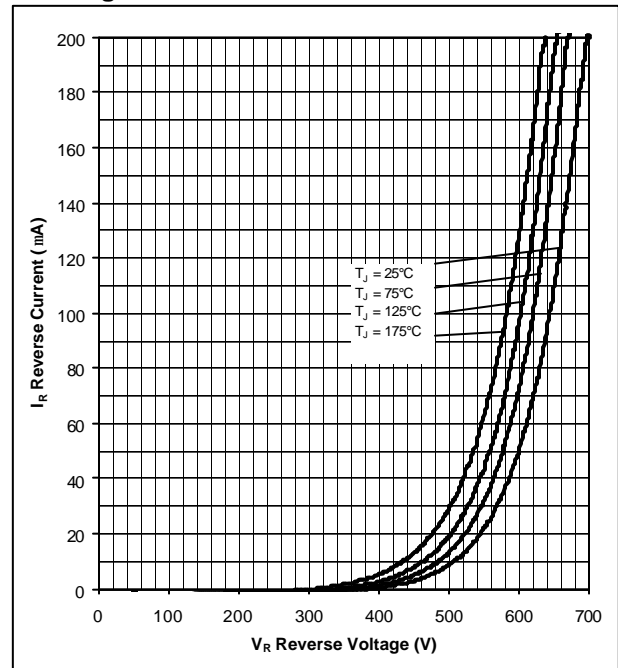
Characteristic		Symbol	Min	Typ	Max	Units
Thermal Resistance from Junction to Case	Per Leg	$R_{\theta JC}$		1.08		$^\circ C/W$
	Per Device	$R_{\theta JC}$		0.54		$^\circ C/W$

**Typical Performance (Per Leg)**

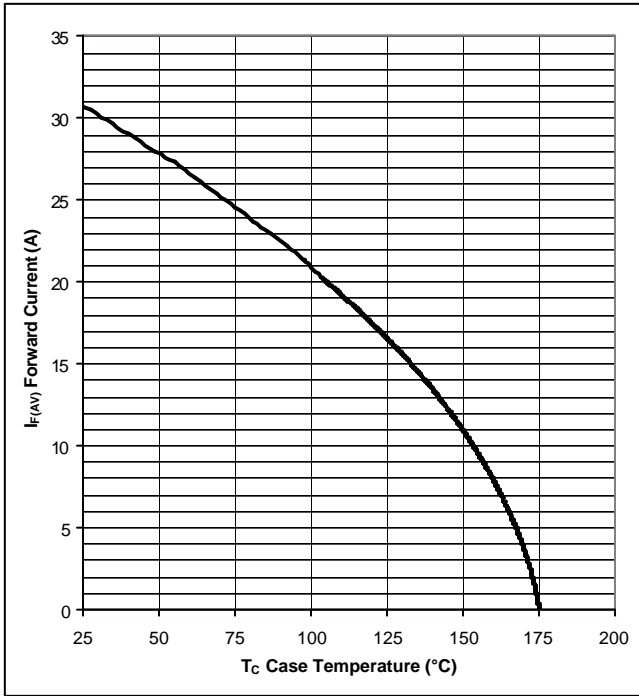
**Figure 1. Forward Characteristics**



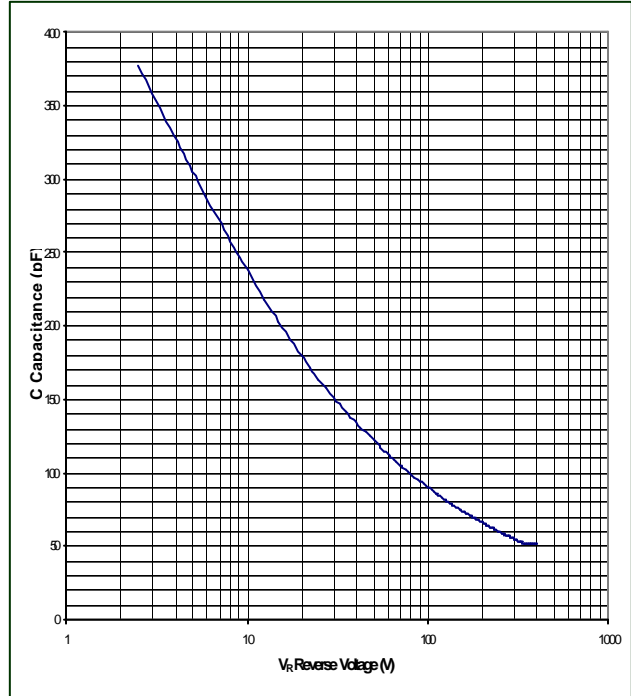
**Figure 2. Reverse Characteristics**



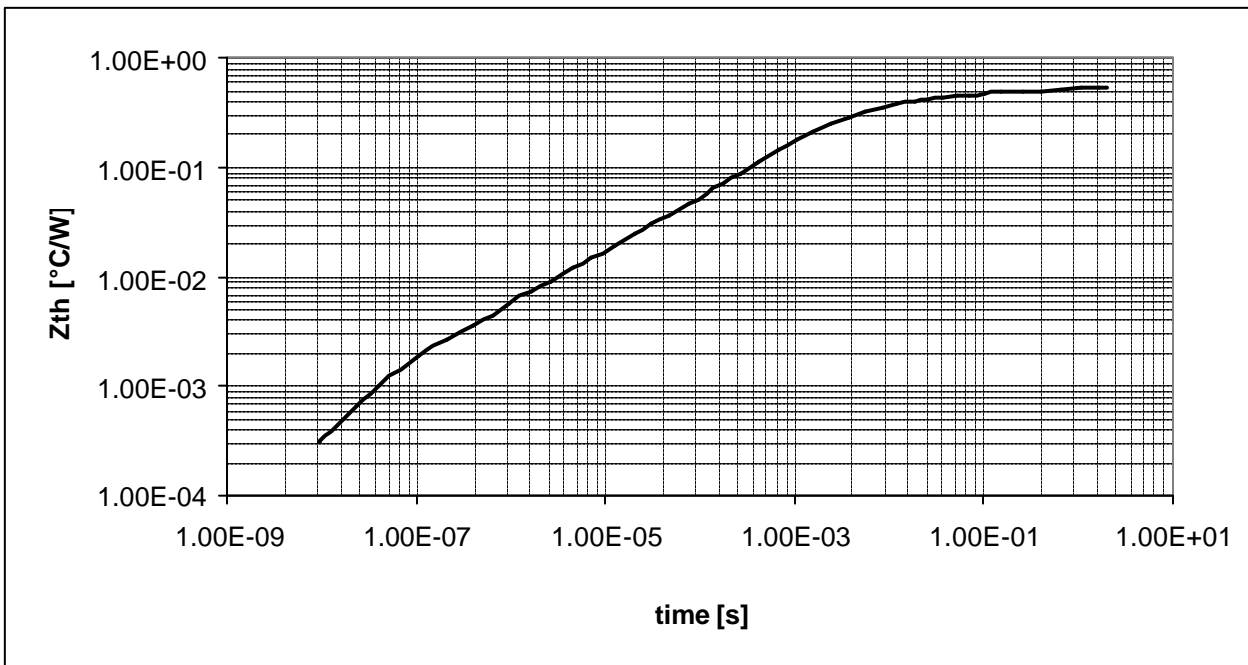
**Figure 3. Current Derating**



**Figure 4. Capacitance vs. Reverse Voltage**

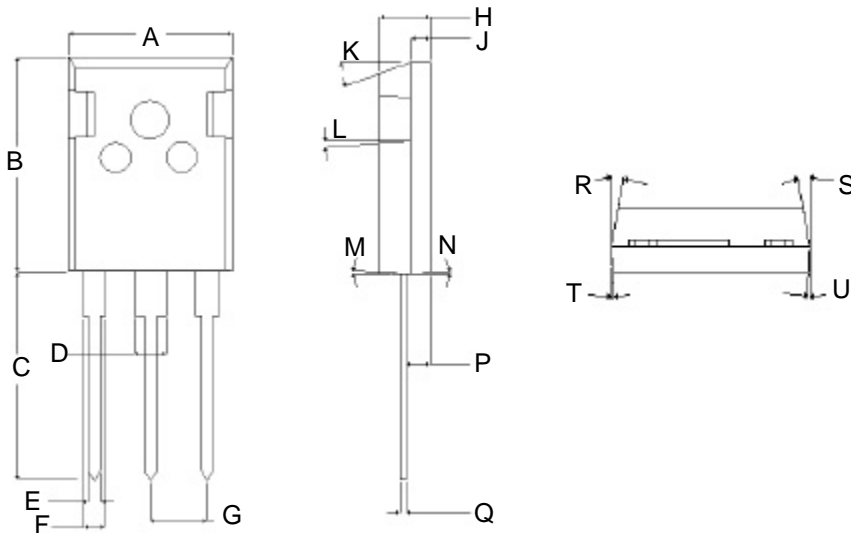


**Figure 5. Transient Thermal Impedance (Per Device)**

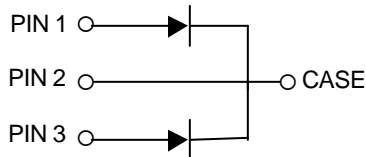


**Package Dimensions**

**Package TO-247-3**



POS	Inches		Millimeters	
	Min	Max	Min	Max
A	.621	.631	15.773	16.027
B	.820	.830	20.823	21.077
C	.789	.799	20.053	20.307
D	.120	.126	3.044	3.196
E	.047	.052	1.200	1.327
F	.075	.084	1.903	2.132
G	.215 TYP		5.450 TYP	
H	.193	.203	4.903	5.157
J	.075	.081	1.904	2.056
K	19°	21°	19°	21°
L	4°	6°	4°	6°
M	2°	4°	2°	4°
N	2°	4°	2°	4°
P	.093	.097	2.349	2.451
Q	.024	.030	.600	.752
R	9°	11°	9°	11°
S	9°	11°	9°	11°
T	2°	4°	2°	4°
U	2°	4°	2°	4°



Part Number	Package	Marking
CSD20060D	TO-247-3	CSD20060

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