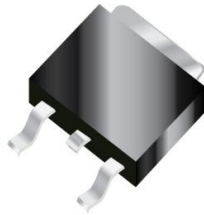




# P30E45CD2



## Excellent Schottky Barrier Rectifiers



**D2-PAK**

Primary Characteristics		
$I_F$	30	A
$V_{RRM}$	45	V
$I_{FSM}$	200	A
$V_F$	0.5	V
$T_J$ max	150	°C

Features
<ul style="list-style-type: none"> <li>• Low Forward Voltage Drop</li> <li>• Excellent High Temperature Stability</li> <li>• Excellent Barrier Rectifier Technology</li> <li>• Soft, Fast Switching Capability</li> </ul>

Mechanical Data
<ul style="list-style-type: none"> <li>• Case: D2-PAK</li> <li>• Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0</li> <li>• Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208</li> <li>• Weight: 1.43 grams (approximate)</li> </ul>

Ordering Information			
Part No.	Remark	Package	Packing
P30E45CD2	General	D2-PAK	800 / Reel
P30E45CD2-H	Halogen Free		

Maximum Ratings (TA=25°C unless otherwise noted)			
PARAMETER	SYMBOL	P30E45CD2	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	45	V
Maximum RMS voltage	$V_{RMS}$	31.5	V
Maximum DC blocking voltage	$V_{DC}$	45	V
Maximum average forward rectified current (Total)	$I_F$	30	A
(Per Leg)		15	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	200	A
Maximum Instantaneous Forward Voltage IF=3A @ 25°C IF=15A @ 25°C	$V_F$	0.34 Typ.	V
		0.50 Max	
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	$I_R$	0.5	mA
		15	
Typical Junction Capacitance(NOTE1)	$C_j$	760	pF
Typical Thermal Resistance	$R_{\theta JC}$	3	°C/W
Operating Temperature Range	$T_J$	-55 to +150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C
Marking Code		P30E45CD2、30E45CD2	

**NOTES:**

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC



## Excellent Schottky Barrier Rectifiers

### Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

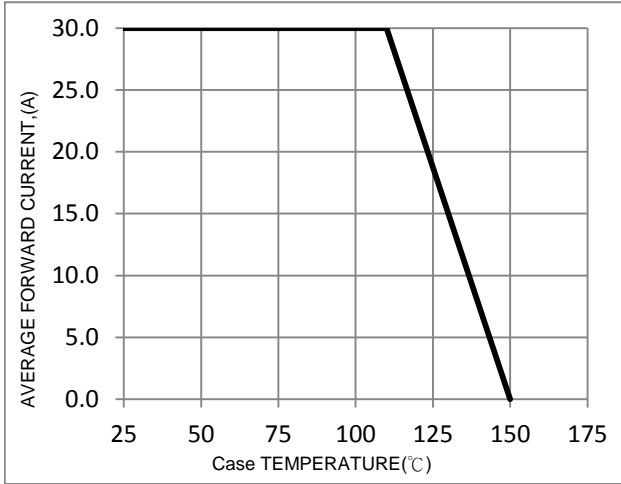


FIG. 2-Typical Forward Characteristics

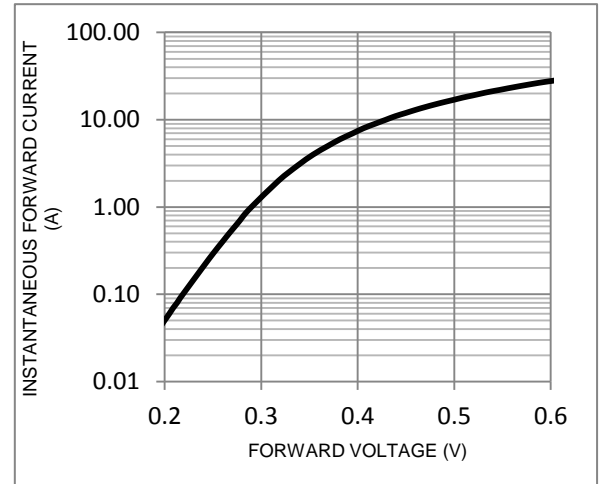


FIG. 3-Maximum Non-Repetitive Forward Surge Current

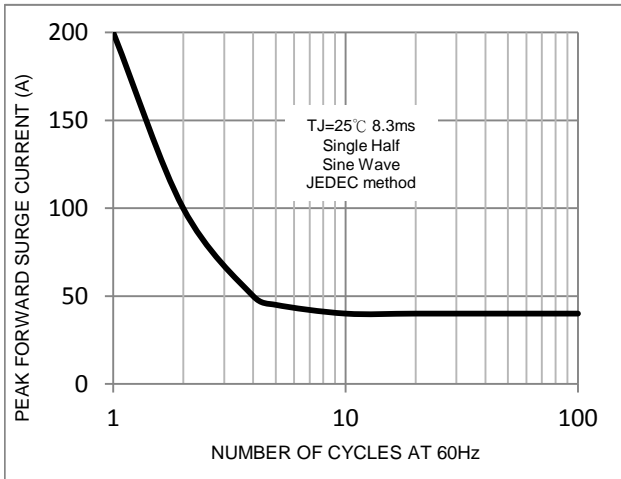


FIG. 4-Typical Reverse Characteristics

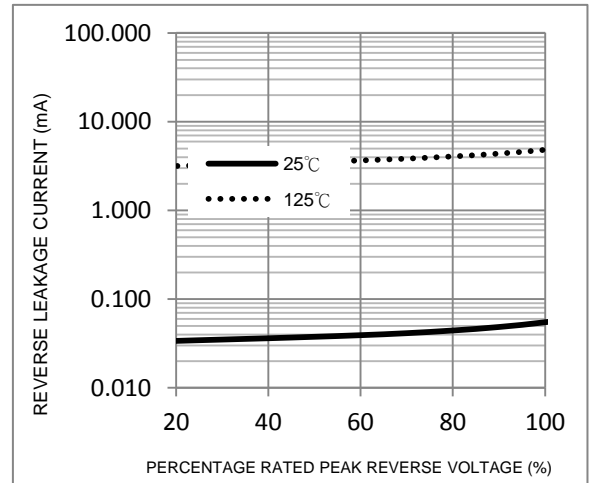
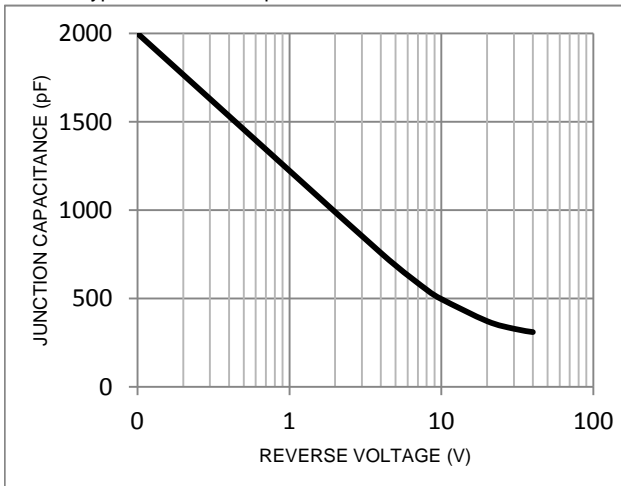
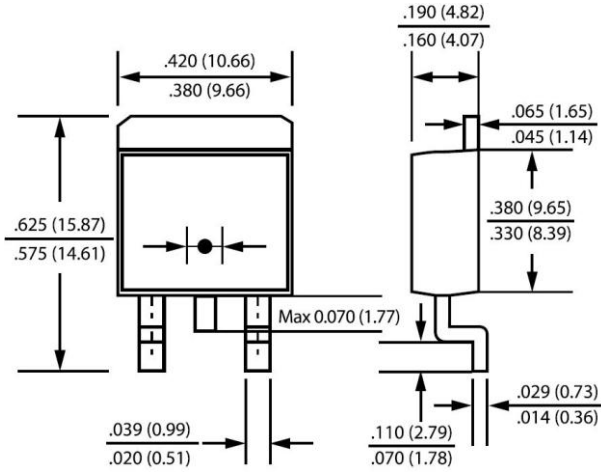


FIG. 5-Typical Junction Capacitance



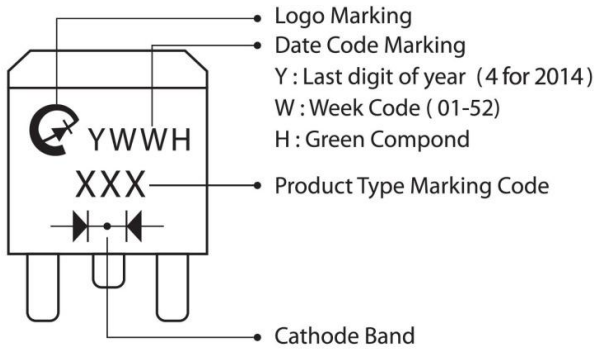
### Package Outline Dimensions



### D2-PAK

Dimensions in inches and (millimeters)

### Marking Information



### Suggested Pad Layout

Dimension	Outline	D2PAK (mm)
A		5.08
B		1.10
C		10.80
D		8.30
E		3.50
F		16.90

