

## 60 VOLTS, 10 AMP DUAL SCHOTTKY COMMON CATHODE CENTERTAP RECTIFIER

Qualified per MIL-PRF-19500/680

### DEVICES

**1N6842U3**

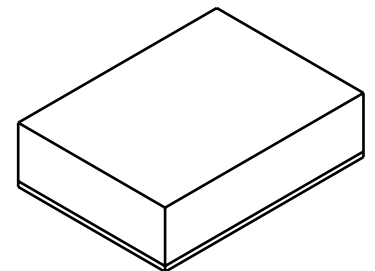
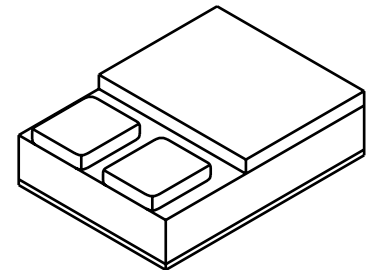
### LEVELS

**JAN  
 JANTX  
 JANTXV**

### FEATURES

- Low Profile Ceramic SMD
- High Surge Rating
- Low Reverse Leakage Current
- Low Forward Voltage
- Low Power Losses

### U3 Package (SMD-0.5)



### ABSOLUTE MAXIMUM RATINGS ( $T_C = +25^\circ\text{C}$ unless otherwise noted)

Parameters / Test Conditions	Symbol	Value	Unit
<b>Peak Repetitive Reverse and DC Blocking Volt</b> 1N6842U3	$V_{RRM}$ $V_{RWN}$ $V_R$	60	Volts
<b>Average Rectified Forward Current</b> (Resistive Load, 60Hz, Sine Wave, $T_A = 25^\circ\text{C}$ )	$I_O$	10	Amps
<b>Peak Surge Current</b> 8.3ms Pulse, $T_A = 25^\circ\text{C}$ , per leg	$I_{FSM}$	200	Amps
<b>Operating &amp; Storage Temperature</b>	$T_{op}$ & $T_{stg}$	-65 to + 150	$^\circ\text{C}$
<b>Maximum Thermal Resistance</b> Junction to Case, each individual diode Junction to Case Note 1	$R_{\theta JC}$	2.8 1.7	$^\circ\text{C}/\text{W}$

**Note 1:** Both legs tied together

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 Website: <http://www.microsemi.com>

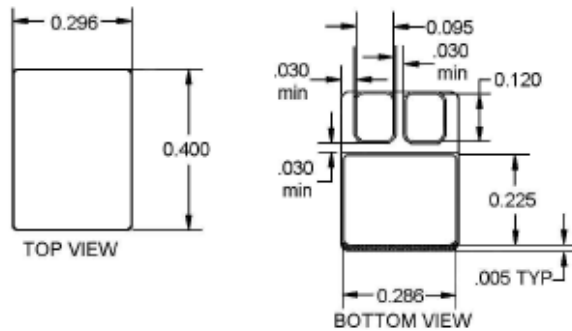
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### ELECTRICAL CHARACTERISTICS (per leg)

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
<b>Instantaneous Forward Voltage Drop</b> $I_F = 3A_{dc}$ , $T_A = 25^\circ C$ , 300 $\mu s$ Pulse $I_F = 10A_{dc}$ , $T_A = 25^\circ C$ , 300 $\mu s$ Pulse $I_F = 15A_{dc}$ , $T_A = 25^\circ C$ , 300 $\mu s$ Pulse	$V_F$		0.62 0.78 0.90	Vdc
<b>Instantaneous Forward Voltage Drop</b> $I_F = 10A_{dc}$ , $T_A = 100^\circ C$ , 300 $\mu s$ Pulse $I_F = 15A_{dc}$ , $T_A = 100^\circ C$ , 300 $\mu s$ Pulse	$V_F$		0.70 0.80	Vdc
<b>Reverse Leakage Current</b> Rated $V_R$ , $T_A = 25^\circ C$ , 300 $\mu s$ pulse minimum	$I_R$		50	$\mu A$
<b>Reverse Leakage Current</b> Rated $V_R$ , $T_A = 100^\circ C$ , 300 $\mu s$ pulse minimum	$I_R$		10	mA
<b>Junction Capacitance</b> $V_R = 10V_{dc}$ , $T_A = 25^\circ C$ , $f = 1MHz$	$C_J$		800	Pf

### CASE OUTLINE: SMD-0.5



### TYPICAL OPERATING CURVES (TA=25°C Unless otherwise specified)

