

100 VOLTS, 10 AMP DUAL SCHOTTKY COMMON CATHODE CENTERTAP RECTIFIER

Qualified per MIL-PRF-19500/681

DEVICES

1N6843CCU3

LEVELS

JAN
JANTX
JANTXV

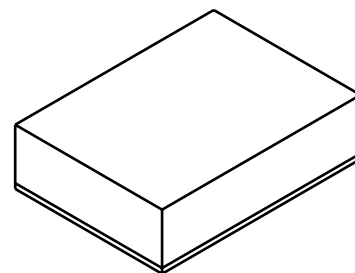
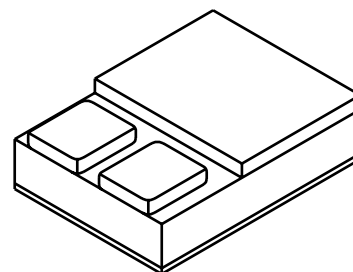
FEATURES

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

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

Parameters / Test Conditions	Symbol	Value	Unit
Peak Repetitive Reverse and DC Blocking Volt 1N6843	V_{RRM} V_{RWN} V_R	100	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_A = 25^\circ\text{C}$)	I_O	10	Amps
Peak Surge Current 8.3ms Pulse, $T_A = 25^\circ\text{C}$, per leg	I_{FSM}	100	Amps
Operating & Storage Temperature	T_{op} & T_{stg}	-65 to + 150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case Note 1	$R_{\theta JC}$	2.8 1.7	$^\circ\text{C/W}$

U3 Package (SMD-0.5)



Note 1: Both legs tied together



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TECHNICAL DATA SHEET

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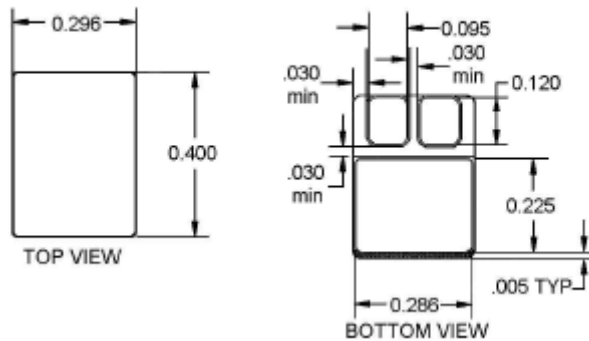
ELECTRICAL CHARACTERISTICS (per leg)

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Instantaneous Forward Voltage Drop $I_F = 5A(pk), T_A = 25^{\circ}C, 300\mu s$ Pulse $I_F = 15A(pk), T_A = 25^{\circ}C, 300\mu s$ Pulse $I_F = 30A(pk), T_A = 25^{\circ}C, 300\mu s$ Pulse	V_F		0.77 1.03 1.27	V
Instantaneous Forward Voltage Drop $I_F = 5A(pk), T_C = +125^{\circ}C, 300\mu s$ Pulse $I_F = 15A(pk), T_C = +125^{\circ}C, 300\mu s$ Pulse $I_F = 30A(pk), T_C = +125^{\circ}C, 300\mu s$ Pulse	V_F		0.60 0.77 0.95	V
Instantaneous Forward Voltage Drop $I_F = 5A(pk), T_C = -55^{\circ}C, 300\mu s$ Pulse $I_F = 15A(pk), T_C = -55^{\circ}C, 300\mu s$ Pulse $I_F = 30A(pk), T_C = -55^{\circ}C, 300\mu s$ Pulse	V_F		0.86 1.18 1.43	V
Reverse Leakage Current Rated $V_R, T_A = 25^{\circ}C, 300\mu s$ pulse minimum	I_R		10	μA
Reverse Leakage Current Rated $V_R, T_C = 125^{\circ}C, 300\mu s$ pulse minimum	I_R		5	mA
Junction Capacitance $V_R = 10Vdc, T_A = 25^{\circ}C, f = 1MHz$	C_J		275	Pf

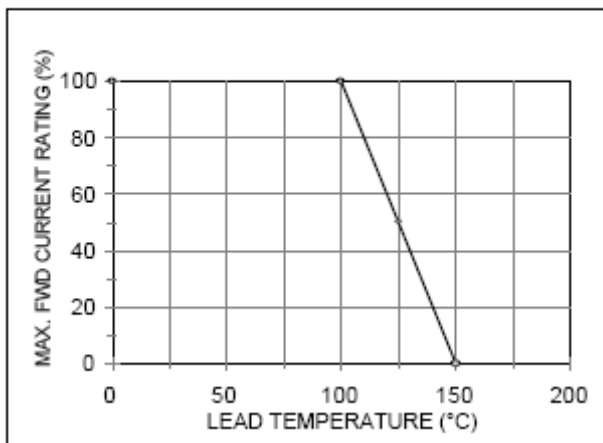
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CASE OUTLINE: SMD-0.5



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



1N6843 VF vs. IF (per die)

